

<110> Ruben et al.

<120> 27 Human secreted proteins

<130> PZ038P1

<140> Unassigned

<141> 2000-09-13

<150> PCT/US00/06783

<151> 2000-03-16

<150> 60/125,055

<151> 1999-03-18

<160> 156

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

<400> 1

gggatccgga	gccc aaatct	tctgacaaaa	ctcacacatg	cccaccgtgc	ccagcacctg	60
aattcgaggg	tgcaccgtca	gtcttcctct	tcccccaaa	acccaaggac	accctcatga	120
tctcccgga	tcctgaggtc	acatgcgtgg	tggtggacgt	aagccacgaa	gaccctgagg	180
tcaagttcaa	ctggtacgtg	gacggcgtgg	aggtgcataa	tgccaagaca	aagccgcggg	240
aggagcagta	caacagcacg	taccgtgtgg	tcagcgtcct	caccgtcctg	caccaggact	300
ggctgaatgg	caaggagtac	aagtgcagg	tctccaacaa	agccctccca	acccccatcg	360
agaaaacat	ctccaaagcc	aaagggcagc	cccgagaacc	acaggtgtac	accctgcccc	420
catcccgga	tgagctgacc	aagaaccagg	tcagcctgac	ctgcctgggc	aaaggcttct	480
atccaagcga	catcgccgtg	gagtgggaga	gcaatgggca	gccggagAAC	aactacaaga	540
ccacgcctcc	cgtgctggac	tccgacggct	ccttcttctc	ctacagcaag	ctcaccgtgg	600
acaagagcag	gtggcagcag	gggaacgtct	tctcatgctc	cgtgatgcat	gaggctctgc	660
acaaccacta	cacgcagaag	agcctctccc	tgtctccggg	taaatagagt	cgacggccgc	720
gactctagag	gat					733

<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp	Ser	Xaa	Trp	Ser
1				5

<210> 3

<211> 86

<212> DNA

<213> Homo sapiens

<400> 3

gcgcctcgag	atttccccga	aattctagatt	tccccgaaat	gatttccccg	aaatgatttc	60
cccgaatat	ctgccatctc	aattag				86

<210> 4  
 <211> 27  
 <212> DNA  
 <213> Homo sapiens

<400> 4  
 gcggcaagct ttttgcaaag cctaggc 27

<210> 5  
 <211> 271  
 <212> DNA  
 <213> Homo sapiens

<400> 5  
 ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60  
 aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120  
 gccctaact cgcgccagtt cgcgccattc tccgccccat ggctgactaa ttttttttat 180  
 ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240  
 ttttgaggc ctaggctttt gcaaaaagct t 271

<210> 6  
 <211> 32  
 <212> DNA  
 <213> Homo sapiens

<400> 6  
 gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7  
 <211> 31  
 <212> DNA  
 <213> Homo sapiens

<400> 7  
 gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 8  
 <211> 12  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
 ggggactttc cc 12

<210> 9  
 <211> 73  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
 gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60  
 ccatctcaat tag 73

<210> 10  
 <211> 256  
 <212> DNA  
 <213> Homo sapiens

<400> 10  
 ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60

10050222-011802

caattagtca	gcaaccatag	tcccgcacct	aactccgccc	atcccgcacc	taactccgcc	120
cagttccgcc	cattctccgc	cccatggctg	actaattttt	tttatttatg	cagaggccga	180
ggccgcctcg	gcctctgagc	tattccagaa	gtagtgagga	ggcttttttg	gaggcctagg	240
cttttgcaaa	aagctt					256

<210> 11  
 <211> 3191  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (5)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (10)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (32)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (3179)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (3186)  
 <223> n equals a,t,g, or c

<400> 11						
gggnntcatn	tggtaaaggc	caagctggta	cntctgcagg	taccgggtccg	gaattcccgg	60
gtcgaccac	gcgtccggca	tggccctccc	agccctgggc	ctggaccctt	ggagcctcct	120
gggccttttc	ctcttccaac	tgcttcagct	gctgctgccc	acgacgaccg	cggggggagg	180
cgggcagggg	cccatgccca	gggtcagata	ctatgcaggg	gatgaacgta	gggcacttag	240
cttcttccac	cagaagggcc	tccaggattt	tgacactctg	ctcctgagtg	gtgatggaaa	300
tactctctac	gtgggggctc	gagaagccat	tctggccttg	gatatccagg	atccaggggt	360
ccccaggcta	aagaacatga	taccgtggcc	agccagtgac	agaaaaaaga	gtgaatgtgc	420
ctttaagaag	aagagcaatg	agacacagtg	tttcaacttc	atccgtgtcc	tggtttctta	480
caatgtcacc	catctctaca	cctgcggcac	cttgccttcc	agccctgctt	gtaccttcat	540
tgaacttcaa	gattcctacc	tgttgcccac	ctcggaggac	aaggtcatgg	agggaaaagg	600
ccaaagcccc	tttgaccccc	ctcacaagca	tacggctgtc	ttggtggatg	ggatgctcta	660
ttctgggtact	atgaacaact	tcctgggcag	tgagcccatc	ctgatgcgca	cactgggata	720
ccagcctgtc	ctcaagaccg	acaacttctt	ccgctggctg	catcatgacg	cctcctttgt	780
ggcagccatc	ccttcgaccc	aggtcgtcta	cttcttcttc	gaggagacag	ccagcgagtt	840
tgacttcttt	gagaggctcc	acacatcgcg	ggtggctaga	gtctgcaaga	atgacgtggg	900
cggcgaaaag	ctgctgcaga	agaagtggac	caccttctct	aaggccagc	tgctctgcac	960
ccagccgggg	cagctgccct	tcaacttcat	ccgccacgcg	gtcctgctcc	ccgccgattc	1020
tcccacagct	ccccacatct	acgcagtctt	cacctcccag	tggcagggtt	gcgggaccag	1080
gagctctgcg	gtttgtgcct	tctctctctt	ggacattgaa	cgtgtcttta	aggggaaata	1140
caaagagttg	aacaaagaaa	cttcacgctg	gactacttat	agggggccct	agaccaaccc	1200
ccggsaggc	agttgctyar	tggggcccty	ctctgataag	gccctgacct	tcataagga	1260
ccatttcctg	atggatgagc	aagtgggtgg	gacgcccttg	ctggtgaaat	ctggcgtgga	1320
gtatacacgg	cttgacgtgg	agacagccca	gggccttgat	gggcacagcc	atcttgtcat	1380
gtacctggga	accaccacag	ggtcgctcca	caaggctgtg	gtaagtgggg	acagcagtg	1440

10650282-011802

tcattctgggtg	gaagagattc	agctgytccc	tgaccttgaa	cctgttccga	acctgcagct	1500
ggccccccacc	caggggtgcag	tgtttgkagg	cttctyagga	ggtgtctgra	gggtgccccg	1560
agccaactgt	agtgtctatg	'agagctgtgt	ggactgtgtc	cttgccccggg	acccccactg	1620
tgccctgggac	cctgagtcctc	gaacctgttg	cctcctgtct	gcccccaacc	tgaactcctg	1680
gaagcaggac	atggagcggg	ggaaccacaga	gtgggcatgt	gccagtggcc	ccatgagcag	1740
gagccttcgg	cctcagagcc	gccccgaaat	cattaaagaa	gtcctggctg	tccctaactc	1800
catcctggag	ctccccctgcc	cccacctgtc	agccttgccc	tcttattatt	ggagtcatgg	1860
cccagcagca	gtcccagaag	cctcttccac	tgtctacaat	ggctccctct	tgctgatagt	1920
gcaggatgga	gttggggggtc	tctaccagtg	ctgggcaact	gagaatggct	tttcataccc	1980
tgtgatctcc	tactgggttg	acagccagga	ccagaccctg	gccctggatc	ctgaactggc	2040
aggcatcccc	cgggagcatg	tgaaggtccc	gttgaccagg	gtcagtgggtg	gggcccgcct	2100
ggctgcccag	cagtcctact	ggccccactt	tgctactgtc	actgtcctct	ttgccttagt	2160
gcttttcagga	gccctcatca	tcctcgtggc	ctccccattg	agagcactcc	gggctcgggg	2220
caaggttcag	ggctgtgaga	ccctgcgccc	tggggagaag	gccccgttaa	gcagagagca	2280
acacctccag	tctcccaagg	aatgcaggac	ctctgccagt	gatgtggacg	ctgacaacaa	2340
ctgcctaggc	actgaggtag	cttaaaactct	aggcacaggc	cggggctgcg	gtgcaggcac	2400
ctggccatgc	tggctggggc	gccccagcac	agccctgact	aggatgacag	cagcacaaaa	2460
gaccaccttt	ctccccctgag	aggagcttct	gctactctgc	atcactgatg	acactcagca	2520
gggtgatgca	cagcagtcctg	cctccccctat	gggactccct	tctaccaagc	acatgagctc	2580
tctaacaggg	tgggggctac	ccccagacct	gctcctacac	tgatattgaa	gaacctggag	2640
aggatccttc	agttctggcc	attccaggga	ccctccagaa	acacagtgtt	tcaagagacc	2700
ctaaaaaacc	tgctctgtccc	aggacctat	ggtaatgaac	accaaaccatc	taaaacaatca	2760
tatgctaaca	tgccactcct	ggaaaactcca	ctctgaagct	gccgcttttg	acaccaacac	2820
tcccttctcc	cagggctcatg	ctccctctctg	ctccctctctg	cttcccttac	cagtcgtgca	2880
ccgctgactc	ccaggaagtc	ttycctgaag	tctgaccacc	tttcttcttg	cttcagttgg	2940
ggcagactct	gatcccttct	gccctggcag	aatggcaggg	gtaatctgag	ccttcttcac	3000
tcctttaccc	tagctgaccc	cttcacctct	ccccctccct	tttcttttgt	tttgggattc	3060
agaaaaactgc	ttgtcagaga	ctgtttatctt	tttattaaaa	atataaggct	taaaaaaaaa	3120
aaaaaaaaaaaa	aaaaaaaaaaaa	aaaaaaaaaaaa	aaaaaaaaaaaa	aaaaaaaaaaaa	aaaaaaaaaagn	3180
gggggncccc	c					3191

<210> 12  
 <211> 1104  
 <212> DNA  
 <213> Homo sapiens

<400> 12						
gcagggtaccg	gtccggaatt	cccgggtcga	cccacgcgtc	cgggcctyct	ccactggggtc	60
cgaatcagta	ggtgaccccc	cccctggatt	ctggaagacc	tcaccatggg	acgcccccca	120
cctcgtgcgg	ccaagacgtg	gatgttcctg	ctcttgctgg	ggggagcctg	ggcagcgtgt	180
ggaagcctgg	acctcctcac	taagttgtat	gcgagagaact	tgccgtgtgt	ccatttgaac	240
ccacagtggc	cttcccagcc	ctcgcactgc	cccagagggt	ggcgatccaa	ccctctccct	300
cctgctgcag	gacactccag	ggcacaggag	gacaagggtg	tggggggtca	tgagtgccaa	360
ccccattcgc	agccttgga	ggcggccttg	ttccagggcc	agcaactact	ctgtggcggt	420
gtccttctag	gtggcaactg	ggtccttaca	gctgccact	gtaaaaaacc	gaaatacaca	480
gtacgcctgg	gagaccacag	cctacagaat	aaagatggcc	cagagcaaga	aatacctgtg	540
gttcagtcca	tcccacaccc	ctgytacaac	agcagcgatg	tggaggacca	caaccatgat	600
ctgatgcttc	ttcaactgcg	tgaccaggca	tccctggggg	ccaaagtga	gcccatcagc	660
ctggcagatc	attgcaccca	gcctggccag	aagtgcaccg	tctcaggctg	gggcactgtc	720
accagtcccc	gagagaattt	tcctgacact	ctcaactgtg	cagaagtaaa	aatctttccc	780
cagaagaagt	gtgaggatgc	ttaccggggg	cagatcacag	atggcatggt	ctgtgcaggc	840
agcagcaaa	gggctgacac	gtgccagggc	gattctggag	gccccctggg	gtgtgatggg	900
gcactccagg	gcatcacatc	ctggggctca	gaccctctgt	ggaggtccga	caaacctggc	960
gtctatacca	acatctgcg	ctacctggac	tggatcaaga	agatcatagg	cagcaagggc	1020
tgattctagg	ataagcacta	gatctccctt	aataaactca	caactctctg	gttcaaaaaa	1080
aaaaaaaaaaaa	aaaagggcgg	cgc				1104

<210> 13  
 <211> 1927  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE

<222> (1920)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1923)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1927)  
<223> n equals a,t,g, or c

<400> 13

ggtggcccca	gcggtgctgtg	gcctccggga	gtgggaagtg	gaggcaggag	ccttccttac	60
acttcgccat	gagtttccctg	atcgactcca	gcatcatgat	tacctcccag	ataaccatgc	120
ctcgacttta	ctcaacaaaa	gtgaagccaa	aagatactat	tttttggtt	tgggtggcct	180
ttcttcctgc	gccaatgtgt	taaagactat	gagatacgtc	agtatgtgt	acaggtgatc	240
ttctccgtga	cgtttgcatt	ttcttgcacc	atgtttgagc	tcatcatctt	tgaaatctta	300
ggagtattga	atagcagctc	cgtttatttt	cactggaaaa	tgaacctgtg	ygtaattctg	360
ctgatccctg	ttttcatggt	gccttttttac	attggctatt	ttattgtgag	caatatccga	420
ctactgcata	aacaacgact	gcttttttcc	tgtctcttat	ggctgacctt	tatgtatttc	480
ttctggaaac	taggagatcc	ctttccatt	ctcagcccaa	aacatgggat	cttatccata	540
gaacagctca	tcagccgggt	tgggtgtgatt	ggagtgactc	tcattggctct	tctttctgga	600
tttggtgctg	tcaactgcc	atacacttac	atgtcttact	tcctcaggaa	tgtgactgac	660
acrgatatct	tagccctgga	acggcgactg	ctgcaaacca	tggatatgat	cataagcaaa	720
aagaaaagga	tggcaatggc	acggagaaca	atgttccaga	agggggaagt	gcataacaaa	780
ccatcagggt	tctggggaat	gataaaaagt	gttaccactt	cagcatcagg	aagtgaaaat	840
cttactctta	ttcaacagga	agtggatgct	ttggaagaat	taagcaggca	gctttttctg	900
gaaacagctg	atctatatgc	taccaaggag	agaatagaat	actccaaaac	cttcaagggg	960
aaatatctta	attttcttgg	ttactttttc	tctatttact	gtgtttggaa	aattttctatg	1020
gctaccatca	atattgtttt	tgategagtt	gggaaaacgg	atcctgtcac	aagaggcatt	1080
gagatcactg	tgaattatct	gggaatccaa	tttgatgtga	agtttttggtc	ccaacacatt	1140
tccttcattc	ttgttggaa	aatcatcgtc	acatccatca	gaggattgct	gatcactctt	1200
accaagttct	tttatgccat	ctctagcagt	aagtcctcca	atgtcattgt	cctgctatta	1260
gacacagata	tgggcatgta	ctttgtctcc	tctgtgctgc	tgatccgaat	gagtatgcct	1320
ttagaatacc	gcaccataat	cactggaagtc	cttggagaac	tgcagttcaa	cttctatcac	1380
cgttggtttg	atgtgatctt	cctggctcagc	gctctctcta	gcatactctt	cctctatttg	1440
gctcacaac	aggcaccaga	gaagcaaatg	gcaccttgaa	cttaagccta	ctacagactg	1500
ttagaggcca	gtggtttcaa	aatttagata	taagaggggg	gaaaaatgga	accagggcct	1560
gacattttat	aaacaaacaa	aatgctatgg	tagcattttt	caccttcata	gcatactcct	1620
ccccstcag	gtgatactat	gaccatgagt	agcatcagcc	agaacatgag	agggagaact	1680
aactcaagac	aatactcagc	agagagcatc	ccgtgtggat	atgaggctgg	tgtagaggcg	1740
gagaggagcc	aagaaactaa	aggtgaaaaa	tacactggaa	ctctggggca	agasatgtct	1800
atggttagctg	agccaaacac	gtaggatttc	cgttttaagg	ttcacatgga	aaaggttata	1860
gcctttgcctt	gagattgact	cattaaaatc	agagactgta	aaaaaaaaaa	aaaaaggggn	1920
ccnttan						1927

<210> 14  
<211> 847  
<212> DNA  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (651)  
<223> n equals a,t,g, or c

<400> 14

gggaaaatga	aggcatatat	gataaaaaag	aatgaacata	ctctgtacat	gtttgctgtg	60
tgtgttacag	catcagagcg	cctctgcctc	atatgcctcg	gggaataccc	ccaggcacag	120
acagtcactc	ccgaggccct	ctgggcaaac	atctgtcact	acttcatgtt	gcaatctgct	180
tacagaacta	aggcaccat	cttccgctga	ctttggacat	cagagctcca	ggttctctct	240
cctagaactg	agacacccat	ctgctgctgc	ctgtggacat	cagaactcca	ggttctctct	300
gttagaactg	agacgcccac	cttctgatgc	ttttggacat	cagagttcca	gattatctct	360

cctagacctc	agacatacat	ctgctgctgc	ctttggacat	cagaactcca	ggttctctct	420
cgtagaactg	agacacccat	cttctgatgc	ctttggacat	cagaactcca	gattctgttt	480
tctagacctg	agacacccat	ctgctgctgc	ctttggacat	cagaactcca	ggttctctca	540
cgtagaaccg	aggcaccat	cttctgctgc	ctttggacat	cagaactcca	gattctcagg	600
cccttgctact	ctaggatgtg	tagcagcaac	ccctgcccc	ggttttcagg	ncctttggcct	660
cagacttcaa	gctacacctc	kgretttctc	ggttctgagg	cttttggact	tggactgagc	720
catgytgag	gcatccctgg	gtytccagct	tgcataatgg	ctgttgtagg	acttctcagg	780
ctccataatc	atgtgagcca	attcccttaa	taaatagctt	ctcacttatc	taaaaaaaaa	840
aaaaaaa						847

<210> 15  
 <211> 2175  
 <212> DNA  
 <213> Homo sapiens

<400> 15						
ccacgcgtcc	gccccatgcc	aggtgagtc	gcgggagccg	ccgcccgcgc	cgccccgtcc	60
cagctgccc	cccgccgggc	cccgccgggc	gccaggatgc	tggaggaaagc	gggcgaggtg	120
ctggagaaca	tgctgaaggc	gtcttgctct	cctctcggtc	tcactgtctt	cctgcccgtc	180
gtgctgctgc	tggtggcgcc	gcccgtgcct	gcccgcgacg	ccgcgcacga	gttcaccgtg	240
taccgcatgc	agcagtacga	cctgcagggc	cagccctacg	gcacacggaa	tgcagtgtgt	300
aacacggagg	cgcgacgat	ggcgggcgag	gtgctgagcc	gccgctgcgt	gctcatgcgg	360
ctactggact	tctcctacga	gcagtaccag	aaggccctgc	ggcagtcggc	gggcgcccgtg	420
gtcatcatcc	tgcccagggc	catggccggc	gtgccccagg	acgtcgtccg	gcaattcatg	480
gagatcgagc	cggagatgct	ggccatggag	accgccgtcc	ccgtgtactt	tgccgtggag	540
gacgaggccc	tgctgtctat	ctacaagcag	accaggctg	cctccgcctc	ccagggtctc	600
gcctctgctg	ctgaagtact	gctgcgcacg	gccactgcca	acggcttcca	gatgggtacc	660
agcggggtag	agagcaaggc	cgtgagtgc	tggctgattg	ccagcgtgga	ggggcggtctg	720
acggggctgg	gcggagagga	ccttcccacc	atcgctcatg	tggcccacta	cgacgccttt	780
ggagtggccc	cctggctgtc	gctgggcggc	gactccaacg	ggagcggcgt	ctctgtgtgt	840
ctggagctgg	cagcgtctct	ctcccggctc	tacaactaca	agcgcacgca	cgccgcctac	900
aacctcctgt	tctttgcgtc	tggaggaggc	aagtttaact	accagggaac	caagcgctgg	960
ctggaagaca	acctggacca	cacagactcc	agcctgtctc	aggacaatgt	ggccttcgtg	1020
ctgtgectgg	acaccgtggg	ccggggcagc	agcctgcacc	tgcacgtgtc	caagccgcct	1080
cgggagggca	ccctgcagca	cgcttctctg	cgggagctgg	agacggtggc	cgcgaccag	1140
ttccctgagg	tacggttctc	catggtgcac	aagcggatca	acctggcgga	ggacgtgtgt	1200
gcctgggagc	acgagcgctt	cgccatccgc	cgactgccc	ccttcacgct	gtcccacctg	1260
gagagccacc	gtgacggcca	gcgcagcagc	atcatggagc	tgcggtccc	ggtggattct	1320
aagaccctga	cccgtaacac	gaggatcatt	gcagaggccc	tgactcgagt	catctacaac	1380
ctgacagaga	aggggacacc	cccagacatg	ccggtgttca	cagagcagat	gcagatccag	1440
caggagcagc	tggactcggt	gatggactgg	ctcaccaccc	agccgcgggc	cgcgacgtgt	1500
gtggacaagg	acagcacctt	cctcagcagc	ctggagcacc	acctgagccg	ctacctgaag	1560
gacgtgaagc	agcaccacgt	caaggctgac	aagcgggacc	cagagtttgt	cttctacgac	1620
cagctgaagc	aagtgatgaa	tgcgtacaga	gtcaagccgg	ccgtctttga	cctgctcctg	1680
gctgttgcca	ttgctgccta	cctcggcatg	gcctacgtgg	ctgtccagca	cttcagcctc	1740
ctctacaaga	cgtccagag	gctgctcgtg	aaggccaaga	cacagtgaca	cagccacccc	1800
cacagccgga	gccccgcgc	ctccacagtc	cctggggccg	agcacgagtg	agtggacact	1860
gccccgcgc	ggcgggccct	gcagggacag	gggcctcttc	cctccccggc	ggtggttgga	1920
acactgaatt	acagagcttt	tttctgttgc	tctccgagac	tgggggggga	ttgtttcttc	1980
ttttccttgt	ctttgaactt	ccttgaggga	gagcttgagg	gacgtcccgg	ggccaggcta	2040
cggacttgcg	gacgagcccc	ccagtccctg	gagccggccg	ccctcgggtc	ggtgtaagca	2100
cacatgcacg	attaaagagg	agacgcccgg	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa	2160
aaaaaaaaa	aaaaa					2175

<210> 16  
 <211> 1355  
 <212> DNA  
 <213> Homo sapiens

<400> 16						
ggagtccctga	tcaagtgata	caaagtgcgt	gcaatggtga	cataaactct	tgacagagat	60
tggaaaagta	gctggaacac	catcttttct	tttaactttt	tatggtgctt	ctgttggcat	120
agttggggaa	agcacctaca	acatgagttt	tatcatgaag	cttcacagac	actttcaaag	180
aacagtccatt	ctgcttgcca	ctttttgtat	ggtgagcatt	atcattttctg	cttactacct	240

gtacagtggc	tacaaacagg	aaaatgaact	ctctgagacg	gcttcagaag	ttgactgtgg	300
cgacctccaa	cacctaccat	atcaactaat	ggaagtgaaa	gcaatgaagc	tttttgatgc	360
ctcaaggaca	gacccacag	tcctagtatt	tgtagagagc	cagtactcat	ctcttggtca	420
agacatcatt	atgattctag	aatcaagtag	attccagtat	cacattgaaa	ttgcccctgg	480
aaagggagat	ctcccagtc	ttatagacaa	aatgaaaggc	aaatacattc	tcattattta	540
tgagaatatt	ttaaagtata	taaatatgga	ttcctggaat	cgaagccttc	tagataaata	600
ctgtgtagaa	tatgggtgtg	gtgtcattgg	attccacaaa	actagtgaga	agagtgtaca	660
gagctttcag	ttaaaagggt	tccctttttc	catatatgga	aatcttgag	taaaagattg	720
ttgtattaat	cctcattctc	cattgattcg	tgtgaccaaa	tcttccaagc	ttgaaaaagg	780
ttctttacct	ggaactgact	ggacagtttt	tcagattaat	cattcagcct	atcaaccagt	840
aatatttgcc	aaagtaaaga	ccccagaaaa	cctttctcct	tccatctcta	aagggtgcttt	900
ttatgccact	attatacatg	acctggggct	tcatgatgga	attcaaaggg	ttcttttttg	960
caacaacttg	aactttttgg	tgacaaagct	catcttcata	gatgccatct	ccttcttctc	1020
agggaaagag	ctgacattgt	ccttggacag	gtacattctt	gtggatattg	atgatataatt	1080
tgtgggaaaa	gagggaacaa	gaatgaacac	caatgatgta	aaggtaaggc	tctattttct	1140
caagtttcaa	agttcagttc	atcttccagc	agggatacaa	ctatcccagt	ttgtactaca	1200
actgggttac	ccaggacatg	ggatttactg	ggaaagtctg	ggcaatctag	gattatcgct	1260
caccctaaat	caactaagaa	gattatgtat	ttctatctga	atcaagaaaa	ataaagattt	1320
tactaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaa			1355

<210> 17  
 <211> 2178  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (704)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1337)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1357)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1408)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1641)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1649)  
 <223> n equals a,t,g, or c

<400> 17						
cgggcgcgtg	gaggggcccc	ccgcatggga	agcagcccca	tggeccctcac	tgccctgtgg	60
gccttgcatc	cccatcatgc	tggtcctggc	caccttggtc	gcgtcttca	tcctcaccac	120
cgctgtgttg	gctgaacgcc	tgttccggcg	tgtctctcgc	ccagacccca	gccaccgtgc	180
accaccctg	gtgtggcgcc	caggaggaga	gctgtggatt	garcccatgg	gcaccgcccg	240
aaagcgctct	gaggactgg	atggctctgc	rgtccccctg	ctgacagatc	gggcccctga	300
gcctccacc	caggtgggca	ctttggaggc	ccgagcaaca	gccccacctg	ccccctcagc	360
ccaaaattct	gctcccagca	acttggggcc	ccagaccgta	ctggagggtcc	cagcccgag	420
caccttctg	gggccccagc	cctgggaggg	gaggcccccc	gccacaggcc	tggtgagctg	480
ggtgaaccc	gagcagaggc	cagaggccag	cgtccagttt	gggagcccc	aggccaggar	540

gcagcggcca	gggagcccg	atcctgagtg	gggcctccag	ccacgggtca	ccttggagca	600
gatctcagct	ttctgraagc	gtgaaggccg	gaccagtgtg	gggttctgaa	tccccaggg	660
tccccagaga	tccccgaggg	aggccttgcc	tcagtgggg	cgngacccc	aggatccagc	720
attaggattg	agactgcccc	agcgaagatg	cccttcccag	gtccttcca	cctggagtcc	780
ccctccccgg	gtctgggtgg	tggccaggct	atgtggacta	ggggaagccc	agcagtgcct	840
ctgctcagct	acctgggctg	tggctcagag	acctgggggt	ggagccaatg	ccagggcaga	900
agccttcaag	atcgcatcca	gatgaagaac	ccaaggtact	agatagtcag	gaaatggcat	960
cgaccagcca	cctccacctt	ctttcagtg	ttaccgaagc	caccaatacc	aaagagaacg	1020
ggtcctgcgg	tgctgaacag	cctcggtgtg	gcatgacag	ctggcaggag	atgacaggaa	1080
tccagtttcc	cagagccaca	aatcctgttc	tccttggcca	ctcaccact	gtgaggteet	1140
ctaggaaaat	acacaaagag	aggaccagac	caggcagagg	aacattttgt	ttcatatgaa	1200
ctgggctttg	acccccaaac	tgcaaggagg	aacttgctgg	gccaaagctg	cagcggcgct	1260
gkcttgctgg	agtggggacc	tagagtcaga	gaaaacccmc	aggctcctct	gccccattctc	1320
ctccatctgc	acacgtntca	gcctcggacc	ctcaccnctc	catgggtgagg	aaggccatgg	1380
ccaggggaaa	ctgagtttca	tccaatgnng	agaggagcgt	tgctctagag	cagggcaact	1440
cccaaactgk	gacctctgat	catcgctcct	tccagcttgc	tggagtgtcc	agagagacag	1500
at ttgccaca	agctaggctt	acttataatg	ctccacccta	cagaaatggg	acccaagta	1560
cccaatcttc	ccttttaggag	aggcaggcag	gtgggtgagc	agcagatgta	gtttccattt	1620
ccctgggggt	ttaattttcc	naactttgnc	tttttttttt	tttttttttt	tttttttttt	1680
agacagaatc	tcaactctgt	caccagact	ggagtgcagt	ggcacaatct	caactcacta	1740
cagcctcgaa	ctcctaggct	caagcgatcc	tcccacctca	acctctagaa	tagctgggac	1800
tgcaggtgca	taccaccacg	cccagcta	ttttgtattt	ttttgtaga	gacacgggtc	1860
caccatactg	cctgggcagg	tttccaactc	ctgggtccaa	gtgatccagc	agccttagcc	1920
tcccataatg	ctgggattac	aggtatgagc	actgcacccg	gccacttttt	ttgtttttt	1980
aaacagggtc	tcactctgtt	gcccaggctg	gactacagtg	gcacaatctc	agctcactgc	2040
ggccttgaac	tcttgggctt	aagtgatcct	cccacctcag	tctccctagt	aggtggaact	2100
acaggcatgt	accaccacac	ctgggcaaca	tagcaagagc	ccatctctac	cagaaaaaaa	2160
aaaaaaaaag	gcggcccg					2178

&lt;210&gt; 18

&lt;211&gt; 2229

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2227)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 18

ggcagtatat	aaaattttgtg	gggcttacag	cctcgccccc	ctgcttctact	tctgcagccc	60
acagcatcat	attctcgaaa	agataaagac	caaaggaagc	aacaggcaat	gtggcgagtg	120
ccctctgatt	taaagatgct	aaaaagactc	aaaactcaaa	tggccgaagt	tcgatgtatg	180
aaaactgatg	taaagaatac	actttcagaa	ataaaaagca	gcagtgtctg	ttctggagac	240
atgcagacaa	gccttttttc	tgcctgaccg	gcagctcttg	gtcagtgtgg	aactgaaaaa	300
tctggcagat	tgcaggattt	gggaatggaa	ctcctggcaa	agtcatcagt	tgccaattgt	360
tacatacgaa	actccacaaa	taagaagagt	aattcgccca	agccagctcg	atccagtgtg	420
gcaggtagtc	tatcacttctg	aagagcagtg	gaccctggag	aaaatagtcg	ttcaaaggga	480
gactgtcaga	ctctgtctga	aggctcccca	ggaagctctc	agtctgggag	caggcacagt	540
tctccccgag	ccttgataca	tggcagtatc	ggtgatattc	tgccaaaaac	tgaagaccgg	600
cagtgtaaag	ctttggattc	agatgctgtt	gtgggtgcag	ttttcagtgg	cttgccctgcg	660
gttgagaaaa	ggaggaaaaat	ggtcaccttg	ggggctaatg	ctaaaggagg	tcatctggaa	720
ggactgcaga	tgactgattt	ggaaaaataat	tctgaaactg	gagagttaca	gacctgacta	780
cctgaaggag	cttcagctgc	ccctgaagaa	ggaatgagta	gcgacagtga	cattgaatgt	840
gacactgaga	atgaggagca	ggaagagcat	accagtgtgg	gcgggtttca	cgactccttc	900
atgggtcatg	cacagccccc	ggatgaagat	acacattcca	gttttcctga	tgggtgaacaa	960
ataggccctg	aagatctcag	cttcaataca	gatgaaaata	gtggaaggta	attgccaaat	1020
caagagaact	gacttgcaag	ctaccttgac	cctgaatttt	gctgtagtgt	gtgctcaaat	1080
ttgtcatcag	tcagataatc	agatttggtc	ttattttctc	attatctcga	cctgaaatag	1140
taattttggaa	actggttgaa	ggtggcacag	tttagtctaa	gacagcagta	gtacatggga	1200
aaaacagtat	gggaagagtt	ctttgtaatg	taaggaaata	acaatgtagt	tctctattaa	1260
tttagcattc	ttgtacattc	acaaaaggca	gtttgtctac	tacagcagaa	ggctggttaa	1320
ctgccagaaa	atgtacctcc	aggccctgca	tgcctgcagt	aacccgcccg	gcattgggtgc	1380
tctactgtct	ttggctagag	cttagttgtg	tttaataaat	catctttata	tttgggggtt	1440
taattacagt	tccattagtg	cctgtagatt	agtgaacaga	aaattgcttt	ggaagagatt	1500



ctgcctgtga	gacactatgt	gaataactga	agtaacacta	gactgaatct	ccttttttggg	1560
gtatgtatct	tctctcactt	gttcaagtag	aggcacactg	ttcaaccgca	tggtatcttt	1620
ctgttggtg	acttctacaa	atgtaatttt	aaatgaaatt	aagttaacat	ggattcatta	1680
cgttcctggc	cctgtagaca	cgtgtaagat	tattttaaatt	tcttttcattt	ttttctgcct	1740
cttactatac	gactgtagtg	caacaaatat	tttaaagccc	ccttttcttcc	tttatttttca	1800
ttagttgtac	attgatttca	gtgtcaaacac	atttaaagat	tcattcatgt	tgcacagtgg	1860
cttacatgaa	cgtgaaactg	tgatataagg	ttttcttttca	tactcataat	tagcccaaaa	1920
cagttgccaa	acttttgccat	tgtgctcctg	catttggtgtt	tgagctgcta	tatattttgtg	1980
gaaattacac	tgaaagtgtg	ctaagagact	attgaaaaag	catgaataat	taaatataca	2040
tgtgagagac	atctcatctg	ctgtattttta	cttagtgaat	attgttccact	cttccgtgtc	2100
tgatgtcttg	ctgaatgctg	tgactcatag	tttactttttg	ttcaaaaatag	tttgactttt	2160
ttgttaataa	aatcaacttg	agaaaaaaa	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa	2220
aaaaaancg						2229

<210> 19  
 <211> 1514  
 <212> DNA  
 <213> Homo sapiens

<400> 19							
ccacgcgtcc	ggctggggcct	gcctcggaag	cgcgcgggtgt	cgcgggattct	ctttccgccc	60	
gctccatggc	gggtggatgac	tgactggaag	cccgagtgagg	atgcggctga	cgcggaagcg	120	
ctctgtctcg	tttcttatcg	ccctgtactg	cctattctcc	ctctacgctg	cctaccacgt	180	
cttcttcggg	cgccgcccgc	aggcgccggc	cgggtccccg	cggggcctca	ggaagggggc	240	
ggcccccgcg	cgggagagac	gcggccgaga	acagtcact	ttggaaagtg	aagaatggaa	300	
tccttgggaa	ggagatgaaa	aaaatgagca	acaacacaga	tttaaaacta	gccttcaaat	360	
attagataaa	tccacgaaaag	gaaaaaacaga	tctcagtgta	caaactctggg	gcaaagctgc	420	
cattggcctt	tatctctggg	agcatatttt	tgaaggctta	cttgatccca	gcgatgtgac	480	
tgctcaatgg	agagaaggaa	agtcaatcgt	aggaagaaca	cagtacagct	tcactactgg	540	
tccagctgta	ataccagggt	acttctccgt	tgatgtgaat	aatgtgggtac	tcatttttaa	600	
tggaagagaa	aaagcaaaaga	tcttttatgc	cacccagtg	ttactttatg	cacaaaattt	660	
agtgcataat	caaaaactcc	agcatcttgc	tggtgttttg	ctcggaatg	aacattgtga	720	
taatgagtgg	ataaacccat	tcctcaaaag	aatggaggc	ttcgtggagc	tgcttttcat	780	
aatatatgac	agccccctgga	ttaatgacgt	ggatgttttt	cagtggcctt	taggagtagc	840	
aacatacag	aatttttctg	tggtggaggc	aagttgggtca	atgctgcatg	atgagaggcc	900	
atatttatgt	aatttcttag	gaacgattta	tgaaaattca	tccagacagg	cactaatgaa	960	
cattttgaaa	aaagatggga	acgataagct	ttgttggtt	tcagcaagag	aacactggca	1020	
gcctcaggaa	acaaatgaaa	gtcttaagaa	ttaccaagat	gccttgcttc	agagtgatct	1080	
cacattgtgc	ccggtcggag	taaacacaga	atgctatcga	atctatgagg	cttgctccta	1140	
tggtccatt	cctgtgtgtg	aagacgtgat	gacagctggc	aactgtggga	atacatctgt	1200	
gcaccacggt	gctcctctgc	agttactcaa	gtccatgggt	gctcccttta	tctttatcaa	1260	
gaactggaag	gaactccctg	ctgttttaga	aaaagagaaa	actataattt	tacaagaaaa	1320	
aattgaaaga	agaaaaatgt	tacttcagtg	gtatcagcac	ttcaagacag	agcttaaaat	1380	
gaaatttact	aatatttttag	aaagctcatt	tttaatgaat	aataaaaagt	aattatcttt	1440	
ttgagctaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaacaaa	1500	
aaaaaaaaaa	aaaa					1514	

<210> 20  
 <211> 1021  
 <212> DNA  
 <213> Homo sapiens

<400> 20							
ccacgcgtcc	ggataggcac	aggacaggag	taggcacctc	gcctactgct	gottaacctt	60	
tcagcttctc	caggccccca	atcctgcttg	ctcccagctt	gggaacgaga	cactgctgag	120	
ctggaagact	tgcggggcca	caggcacagc	cttctgctg	ctggcgggcg	tgctggggct	180	
gcctggcaac	ggcttcgttg	tgtggagctt	ggcgggctgg	cggcctgcac	ggggggcgacc	240	
gctggcgggc	acgcttgctg	tgacactggc	gctggccgac	ggcgcggtgc	tgctgctcac	300	
gcccgtcttt	tggttccttc	tgaccgggca	ggcctggccg	ctggggccagg	cgggctgcaa	360	
ggcggtgtac	tacgtgtgct	cgctcagcat	gtacgccagc	gtgctgctca	cggcctgct	420	
cagcctgcag	cgctgcctcg	cagtcacccg	cccttctctg	cgctctggct	gcgcagcccg	480	
gcctggcccc	ccgctgctgc	tgggggtctg	gctggccggc	ctgttgctcg	cgtccccggc	540	
cgcgctctac	cgccacctgt	ggagggaccg	cgtatgccag	ctgtgccacc	cgctcgccgt	600	
ccacgcggcc	gcccacctga	gcctggagac	tctgaccgct	ttcgtgcttc	ctttcgggct	660	

gatgctcggc	tgctacagcg	tgacgctggc	acggctcggc	ggcgcccgct	ggggctccgg	720
gcggcacggg	gcgcgggtgg	gccggctggg	gagcgccatc	gtgcttcctt	cggtctgctc	780
tgggccccct	accacgcagt	'caaccttctg	caggcggtcg	cagcgctggc	tccaccggaa	840
ggggccttgg	cgaagctggg	cggagccggc	caggcgggcg	gagcgggaa	tacggccttg	900
gccttcttca	gttctagcgt	caaccgggtg	ctctacgtct	tcaccgctgg	agatctgctg	960
ccccgggcag	gtccccgttt	cctcacgcgg	ctcttcgaag	gctctgggga	ggcccagagg	1020
g						1021

<210> 21  
 <211> 1859  
 <212> DNA  
 <213> Homo sapiens

<400> 21						60
gtttcgcctc	agaaggctgc	ctcgcctggc	cgaattcggg	ggcgccacgt	ccgcccgtct	120
ccgccttctg	catcgcgggt	tcggcggtct	ccacctagac	acctaacagt	cgcgggascgg	180
ccgcgtcgtg	agggggctcg	cacggggagt	cgggcggtct	tgtgcatctt	ggctacctgt	240
gggtcgaaga	tgctcgacat	cggagactgg	ttcaggagca	tcccgccgat	cacgcgctat	300
tgggttcgct	ccaccgtcgc	cgtgcccttg	gtcggcaaac	tcggcctcat	cagcccgcc	360
tacctcttcc	tctggccccg	agccttccct	tatcgctttc	agatttggag	gccaatcact	420
gccacctttt	atttccctgt	gggtccagga	actggatttc	tttatttggg	caatttatat	480
ttctttatct	agtattctac	gcgacttgaa	acaggagctt	ttgatgggag	gccagcagac	540
tattttattca	tgctcctctt	taactggatt	tgcctcgtga	ttactggctt	agcaatggat	600
atgcagttgc	tgatgattcc	tctgatcatg	tcagtacttt	atgtctgggc	ccagctgaac	660
agagacatga	ttgtatcatt	ttggtttggg	acacgattta	aggcctgcta	tttacctgg	720
gtttatcctg	gattcaacta	tatcatcgga	ggctcggtaa	tcaatgagct	tattggaaat	780
ctgggttggac	atcttttatt	tttccctaag	ttcagatacc	caatggactt	gggagggaaga	840
aatttttctat	ccacacctca	gtttttgtac	cgctggctgc	ccagtaggag	aggaggagta	900
tcaggatttg	gtgtgcccc	tgctagcatg	aggcgagctg	ctgatcagaa	tggcggargc	960
gggagacaca	actggggcca	gggttttcca	cttgagagac	agtgaagggg	cggcctcggg	1020
cagccgctcc	tctcaagcca	catttccctc	cagtgcctgg	tgcrcctaac	aactgcgttc	1080
tggttaaacac	tggtggacct	gacccacact	gaatgtagtc	tttcagtacg	agacaaagtt	1140
tcttaaatacc	cgaagaaaaa	tataagtgtt	ccacaagttt	cacgattctc	attcaagtcc	1200
ttactgctgt	gaagaacaaa	taccaactgt	gcaaattgca	aaactgacta	catttttttg	1260
tgtcttctct	tctccccctt	ccgtctgaat	aatgggtttt	agcgggtcct	agtctgctgg	1320
cattgagctg	gggctgggtc	accaaaccct	tcccaaaagg	acccttatct	ctttcttgca	1380
cacatgcctc	tctcccactt	ttcccaaccc	ccacatttgc	aactagaaga	ggttgcccat	1440
aaaattgctc	tgcccttgac	agggtctgtt	atttattgac	ttttgccaa	gcttggtcac	1500
aacaatcata	ttcacgtaat	tttccccctt	tggtggcaga	actgtagcaa	tagggggaga	1560
agacaagcag	cggatgaagc	gttttctcag	cttttggaa	tgcttcgacc	tgacatccgt	1620
gttaaccgtt	tgccacttct	tcagatatatt	ttataaaaaa	gtaccactga	gtcagtggag	1680
gccacagatt	ggtattaatg	agatacgawg	gttstgtggg	gywgtttaag	attaagaggc	1740
atacaccact	tagtaaaact	atgaaagcct	attgtgaacg	acagggtatt	tcaatgaggc	1800
agatcagatt	ccgatttgac	gggcaaccaa	tcaatgaaac	agacacacct	gcacagtggg	1859
aatggaggga	tgaagataca	attgatgtgt	tccaacagca	gacgggaggt	gtctactga	

<210> 22  
 <211> 1494  
 <212> DNA  
 <213> Homo sapiens

<400> 22						60
acgcgtccgc	agcattcggg	ccgagatgtc	tcgctccgtg	gccttagctg	tgctcgcgtc	120
actctctctt	tctggcctgg	aggctatcca	gcgtgagtc	tctcctaccc	ttcccgtctt	180
ggtccttctt	ctcccgtctt	gcaccctctg	tggccctcgc	tgtgctctct	cgctccgtga	240
cttcccttct	ccaagtctct	cttggtggcc	cgcctggggg	ctagtccagg	gctggatctc	300
ggggaagcgg	cggggtggcc	tgggagtggg	gaaggggggt	cgcaccgggg	acgcgcgcta	360
cttgcccctt	tcggcgggga	gcagggggaga	cctttggcct	acggcgacgg	gagggtcggg	420
acaaagttta	gggcgtcgat	aagcgtcaga	gcgcggaggt	tgggggaggg	tttctcttcc	480
gctctttctc	ggggcctctg	gctccccag	cgcagctgga	gtgggggacg	ggtaggctcg	540
tcccaaaggc	gcggcgctga	ggtttgtgaa	cgcgtggagg	ggcgcttggg	gtctggggga	600
ggcgctgcgc	gggtaagcct	gtctgctgca	gctctgcttc	ccttagactg	gagagctgtg	660
gaactctgct	aggcgccgc	taagtctcga	tgtcttagca	cctctgggtc	tatgtggggc	720
cacaccgtgg	ggaggaaaca	gcacgcgacg	ttttagaat	gcttggctgt	gataaaagcg	

gtttcgaata	attaacttat	ttgttcccat	cacatgtcac	ttttaaaaaa	ttataagaac	780
taccggttat	tgacatcttt	ctgtgtgcca	aggactttat	gtgcttttgcg	tcattttaatt	840
ttgaaaacag	ttatcttccg	ccatagataa	ctacatgggt	atcttctgcc	tctcacagat	900
gaagaaacta	aggcaccgag	attttaagaa	acttaattac	acaggggata	aatgggcagc	960
aatcgagatt	gaagtcaagc	ctaaccaggg	cttttgccgg	agcgcatgcc	ttttggctgt	1020
aattcgtgca	ttttttttta	agaaaaacgc	ctgccttctg	cgtgagattc	tccagagcaa	1080
actggggcgc	atgggccttg	tggtcttttc	gtacagaggg	cttctctctt	ggctctttgc	1140
ctggttggtt	ccaagatgta	ctgtgcctct	tactttcggg	tttgaaaaca	tgaggggggt	1200
gggcgtggta	gcttacgcct	gtaatcccag	cacttaggga	ggccgagggc	ggaggatggc	1260
ttgaggtccg	tagttgagac	cagcctggcc	aacatggtga	agcctggtct	ctacaaaaaa	1320
taataacaaa	aattagccgg	gtgtggtggc	tcgtgcctgt	ggtcccagct	gctccggtgg	1380
ctgaggcggg	aggatctctt	gagcttaggc	ttttgagcta	tcatggcgcc	agtgcactcc	1440
agcgtgggca	acagagcgag	accctgtctc	tcaaaaaaga	aaaaaaaaaa	aaaa	1494

<210> 23  
 <211> 2105  
 <212> DNA  
 <213> Homo sapiens

<400> 23						
tccagaccat	ctacaactgc	acggcctgga	acagcttcgg	ctccgacact	gagatcatcc	60
ggcacgagga	gcaagggttcg	gaaatgaagt	cgggagccgg	gctggaacag	agtctgtgcc	120
gatggccgtc	atcattgagg	tggccgtagg	agctggtgtg	gccttctctg	tccttatggc	180
aaccatcggt	gcgttctgct	gtgcccgttc	ccagagaaat	ctcaaagggtg	ttgtgtcagc	240
caaaaatgat	atccgagttg	aaattgtcca	caaggaaacca	gcctctgggtc	gggagggtga	300
ggagcactcc	accatcaagc	agctgatgat	ggaccggggt	gaattccagc	aagactcagt	360
cctgaaaacag	ctggaggtcc	tcaaagaaga	ggagaaagag	tttcagaacc	tgaaggacct	420
caccaatggc	tactacagcg	tcaacacctt	caaagagcac	cactcaacct	cgacctctc	480
cctctccagc	tgccagcccg	acctgcgtcc	tgcgggttaag	cagcgtgtgc	ccacaggcat	540
gtccttcacc	aacatctaca	gcacctgtag	cggccagggc	cgcctctacg	actacggcag	600
cggtttgtgc	tgggcatggg	cagctcgtcc	atcgagcttt	gtgagcggga	gttccagaga	660
ggctccctca	cgacagcgag	ctccttctct	gacacgcagt	gtgacagcag	cgtcagcagc	720
agcggcaagc	aggatggcta	tgtgcagttc	gacaaggcca	gcaaggcttc	tgtctcctcc	780
tcccaccact	cccagtcctc	gtcccagaac	tctgaccca	gtcgacccct	gcagcggcgg	840
atgcgagctc	acgtctaagg	atcacacacc	gcgggtgggg	acgggccaag	gaagaggtca	900
gggcacgttc	tggttgtcca	gggacgaggg	gtactttgca	gaggacacca	gaattggcca	960
cttccaggac	agcctcccag	cgctctgtcc	actgccttcc	ttcgaagctc	tgatcaagca	1020
caaactctgg	tcccaggtg	ctgtgtgcca	gaggtgggcg	ggtggggaga	cagacagagg	1080
ctgcggctga	gtgcgctgtg	cttagtgctg	gacacccgtg	tccccggccc	tttctctggg	1140
gcccctctac	ccactgtctc	gcccacaggc	acaagtggca	gctataactc	tgtcttctatg	1200
aaactgcggg	ccactctctg	gtctctctgt	gggctctacc	cctcactgac	cacaagctct	1260
acctaccctc	gtgcctgtgc	tcccatacag	ccctggggag	aaggggatga	cgtcttccca	1320
gcactgagct	gccccagaaa	ccccggctcc	ccactgctgc	tcatagcca	tacctgggag	1380
gctgacaagc	cagaaatggc	cttgggctaaa	ggagcctctc	tctcaccagg	ctggcgggga	1440
gcccaccocc	aatttgtttg	gtgtttttgt	tccatactct	tgcagttctg	tccttgggact	1500
tgtgcccgtc	gaactctgcg	gtgggaccgg	tcccgtcaga	gcctggtgta	ctgggggggag	1560
ggagggagga	gggagcctgt	gctgacggag	cacctcgccg	ggtgtgcccc	tcctgggctg	1620
tgtgaccca	gcctccccac	ccacctctct	ctttgtgtac	tcctccctct	ccccctcagca	1680
caatcggagt	tcataataaga	agtgcgggag	cttctctggt	cagggttctc	tgaacactta	1740
tggagagagt	gcttctctgg	aagtgtggcg	tttgaagggg	ctggagggca	ggtctttaag	1800
atggcgagac	tgccttctct	agctgataaa	cacaagaacg	gcgatcctgt	cttcagtaag	1860
gctccacgag	aagagaggaa	gtatatctac	acctcaacct	tcctagtcac	cacctgaaat	1920
aaatgttagg	gacactactc	caacatgttt	gttctgttct	tttgttctta	caaagccaca	1980
ggaagaacct	aagagctcat	agaatgcgtt	gggaacccaa	ggttctctgc	cctcctttga	2040
ttcaatcatc	ctagacaata	aaggcagttg	atagctctga	aaaaaaaaaa	aaaaaaaaaa	2100
aaaaa						2105

<210> 24  
 <211> 1290  
 <212> DNA  
 <213> Homo sapiens

<400> 24						
ccacgcgtcc	gggcctggcg	atgctgtctg	tgggcatcgg	gatcgactac	accacatcgc	60

aagtgtcat	cgatggaaag	gggtgtaagc	cccccgagta	caggaattac	cagatcgtct	120
tcatacgtctt	cggcgttctc	atgaccatgg	ccttgatcgt	tgccactcag	ttccggttcc	180
gctacaacca	tttcaaaaac	gatgattcta	aagggaaaga	ggtggagatc	ccgcagggtg	240
aaaggaacaa	ctctacagag	tccctctgagg	agacaccaac	caccacaage	cactcgcagg	300
ccttcaactt	ttgggactta	atcaagctgc	tctgcagcgt	gcagtatggc	tcagtgtgt	360
ttgtggcttg	gttcatgggt	tttgatatg	gcttcgtgtt	cacctttctc	tactggcatt	420
tggaagacct	caatggaact	acaaccctct	ttgggggtctg	ttcagtcctg	agtcattgtgt	480
ctgagctgac	agcatatttt	tttagtcaca	agcttattga	attgatcggc	cacatcaggg	540
ttctgtacat	tggcctggcc	tgcaatacgg	ctcgctatat	tatatcttct	acctggagaa	600
tgccctggact	gttctcccca	tggaagttct	tcaaggagt	acacacgcgg	ccatctgggc	660
agcatgcatt	tcttacctca	gtgcagccgt	tccccctgag	ctgaggacat	ctgctcaggg	720
catcctgcag	ggccttcacc	tggtgttggg	aagaggatgt	ggtgccatga	tcggaggcgt	780
gtttagtcaat	tattttgggg	ctgctgcaac	cttccgagga	attggcatgg	cctgcttggg	840
gattcctactg	ctctttgccc	tgatccagt	gctggcagt	ccagatgagg	aagaagacaa	900
gacaatgttg	gcagaaagaa	ttcctgttcc	ctccagtcct	gttcctatag	caaccatcga	960
cttggtacag	caacagacag	aagatgtcat	gccacgcatt	gagcccagac	ttccacccaa	1020
gaaaactaag	caccaggaag	aacaggaaga	tgtgaacaaa	ccagcctggg	gagtcagctc	1080
ttctccctgg	gtgacctttg	tctatgcact	ctaccaaatt	aaagagatga	tgcaactcac	1140
aagagacaac	cgtgcttctg	agatacagcc	tttacagggg	accaatgaga	atagggaaaa	1200
ttctcctgct	ggtagagccc	agcctgtccc	atgtgagact	ccatctaaaa	aaaaaaaaaa	1260
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				1290

<210> 25  
 <211> 1728  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (921)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (929)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (974)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (983)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1714)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1715)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1719)  
 <223> n equals a,t,g, or c

<400> 25						
gattcggcac	gagagataat	tcatacacca	ggtaataagc	ataacaccca	atgggtagtt	60
tttccatcct	caccctctctc	ccaccctcca	ctcataagta	ggccccagtt	tctattattc	120

ctttttgtgt	gtgtccatgt	gtacaaaacg	ttttgtcccc	acttatgaga	acatgtggca	180
tttggttttg	tttctgcact	agctcgttta	ggataaatggc	ctctagcttc	acctacgttg	240
ctgcaaagaa	catgatctca	ctgcttttat	ggcttcatag	tgaaatggga	aaagttccct	300
tgtcccccctc	gcaggggtgtg	cgatggggat	gtgactcgct	tcttcagtgt	cccgctgctc	360
aaacctctat	ggggggcatg	cakacgggca	ggctgtgggg	ctccgacccc	aaggcagtgt	420
ctaggggtga	agccccagtg	ggcgtgtgtt	acaggggtgct	ctttcagttt	agccgtccat	480
akgctggcttg	tgtactcagc	tcaattagac	ccctgcctta	tcgcaaggac	agagggcttt	540
ctgtatccct	gggttcttgc	cttgggtgtac	tggagaagaac	ggatcacacg	tgggcttgga	600
gactgagtac	aagggtttgt	tgastggaag	tmctctcagc	arttggggga	gccagaaggg	660
agatgggtttt	ccccctggaat	ctggccattc	agcagcgcag	gctctcctcc	tccgacctg	720
tccaaactcc	atgtttctgcc	ggctgatggc	ctgctgacct	gccggcgctct	gtcgggtgtgc	780
tcttccactg	gcgtgttccc	cttgagtcc	ctggacgtcc	agccgcttgt	gtctctgccc	840
gctagggcgt	tgggtttttta	tgggtacagg	atgggggcat	ggcaagccaa	ggtgggtcttg	900
ggaaatgcaa	cgttttggga	ngaaaacana	aatgcctgtt	ctcacctaag	tctgtgggca	960
caggcctggg	ggtnaaaccc	tanccaaggg	aacacgaact	cctgtacca	gcacttctct	1020
gcccccttc	cctatcaata	gtactccgta	gtttataggt	accgcatttt	ctytatacag	1080
tctaccgttg	atgggcat	aggtgattcc	atgtctttgc	cattgtgaac	agtgttgcaa	1140
tgaacatacg	cgtgcattgtg	tctttatgat	aagacaattt	agatctcttt	acgtgtatac	1200
ccagtaatgg	cattgctggct	tgaatggtar	ttctgtttta	agttatttgc	tgarttcttt	1260
tttaatgggt	tkgtttttca	tagtggtagt	gatgtacca	ttctgaatcy	attttatatt	1320
tattgaagaa	ttaagtgtgt	aaatatgatt	atgtttgaag	aagccagcgt	tctcactgtg	1380
gaagaaagga	ggcagaatta	tggaaatggag	aaaagaaagg	aagatctctg	tgggtgttgt	1440
gaattggcac	aggaggctctc	agtatgaact	catgatttct	aaaacaaaca	aacacgtcaa	1500
tagcgatgag	tgtcccta	gcccagatct	tagttgggtt	ataatagaaa	tggcatcatc	1560
taactagagg	gaaagatgat	gttgcaaaagc	gtggcacttt	ttttttttct	tctttttttg	1620
agacggagtc	tcactctgtc	gtccaggctg	gagtgacagt	gcacaatctc	gctcgtgccg	1680
aattcgatat	caagcttata	gcataccgtc	gacnnccgncg	gggggtcc		1728

<210> 26  
 <211> 1569  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (999)  
 <223> n equals a,t,g, or c

<400> 26						
cccgggaattc	ccgggtcgac	ccacgcgttc	gctytcacca	tctccacact	ggatgattgt	60
cacagtattt	caagccaccc	tggtccaaac	ttgccacact	tagctcatte	tctaaactgc	120
agttaaattg	ctctatgact	gaatgatcat	gggaaggcct	gggcccttcc	tctcccccctc	180
ctctctacca	atcttggcat	caaacacatc	agcaagccat	ggtaactcac	ctgtcactcc	240
ctgaacacat	aatgctgttc	ttttctacat	gatcttgttt	ctgctcctcc	ctctgccttg	300
tggggctttt	ttacaatttt	tcacctggct	aactcttact	caacctttga	aatttagctc	360
tgggtgccata	tctctarga	aaggtagctc	tkaatcccca	gactaagtga	aggtttgagt	420
gcggaacagcc	ttggagaatg	ggagagaatg	aggaaaaacc	tatcaaggag	aaattcccta	480
gactaagcat	gactgtkagg	tgaaaaagca	atgggtgtctt	acattcaggt	tcaagttctt	540
ttgtgktatc	tgctgctcar	gaagctccct	ctttttccctc	aaagagtcag	caacataaga	600
rtgacttart	ggccttgagt	tcctcgtgat	ttcgcattga	aggagaggag	aatgattggg	660
gcttaggggag	aagctgtgct	gggaacacat	ttcagtcata	ggcaagtggg	caaattggaca	720
aggtaggaga	ataaagtccc	ctcctcctgc	atccatactg	agaattaaaa	ttaaaaaaa	780
aaaaaaaaaa	acatagggat	ggaatcacta	ggcatggtgg	ctcatgtctg	taatctcagc	840
actttggggg	gccaaagtgg	gaggatcacc	tgagcccaag	agttcaagac	cagcctgggc	900
aatgtaatga	gaccctatct	ctacaaaaaa	agtagattaa	aaatttttagc	cgggcatggg	960
ggtgagtgcc	tgtaatccca	gttactkagg	aggctgagnc	aggaggattg	caggacccca	1020
ggagttgaag	gttgcagtga	gttatgattg	caccactgta	ctccaactta	ggtgacacag	1080
tgagacccct	ctttcaaaaag	aaaaaaaaaa	catagggaaa	atattgagat	acataattaa	1140
gccattta	ttggacataa	aaaaaggcag	agctagaagt	ctagaggatt	tttgaacgtc	1200
tagtctgtta	attataataa	cactaagaga	agattttatt	tatttattta	tttatttta	1260
tttattgttt	ttgagacaga	atctcactct	gttgcccagg	ctggagtaca	ctgggtgcaat	1320
ctcaggtoac	tgcaacctct	gctcccagg	cttgtgcctc	agccacccaa	gtagttggga	1380
ttatagctgt	gcccaccat	gtccaggtaa	ttttttgtat	tttttagtaa	cacagggttt	1440
ctccatgttg	gccaggctgg	tttcgaactc	ctggcctcaa	gtaattcacc	cacctctgcc	1500
tcccaaagtg	ctgggattac	atgcgtgagc	caccatgcct	ggccaaaaaa	aaaaaaaaag	1560

ggcgggccgc

1569

<210> 27  
 <211> 1058  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1010)  
 <223> n equals a,t,g, or c

<400> 27  
 gtttgagctg aatagagcac ctgcataaat gcccatgggg cattattttac tcttgcttac 60  
 tcttcatcca cctgccacac acccttctct ctccagagtt ctctgtgttc tgtgggtgtct 120  
 ttctcttttg acaggccaaa agatcacaca ggacaacgca atgccattta ccttggactc 180  
 tgtagtcttc atgtttttccc aacttgaatg tttctccttg atggcagcaa ctggatccta 240  
 cattgtccta taactctcag aacatatacc acaaacctaa gcataaaaatt cagtaagtgt 300  
 tcagtaaata tttactcact agagaacaaa sgtttytttt ctaaaaaaaa aaaaaaaaaa 360  
 agaaaagaaa acaacccagg gaacaaaatc tctaattggt aaatttcagt tactttgaca 420  
 ggaatatgca agatattttg gaaaagagca cctttttttt ttcacttcca gtcgtatctg 480  
 tgggtgttctt atagagtgcg gacctccaga agcttctgag aactacatcc aaggatgtct 540  
 gctggggcta tgaaagctca agccttctta ttgcaatggt ggtagctaat atgaggccta 600  
 aatattgggt gaaaaatatg gaggggcttc aggccttcta aaggtatccg aattttctct 660  
 ttcattctta aaataaatac cttcccacca ttcaaaaata aataattctc tcagaatcag 720  
 gaagtttgtg catattttata tccttatcca tgtaggcttc tgaaaaggag cagaaatgtg 780  
 attcctgttt aatagacgta tacaccccat tgtctaatta tgtgcattaa tacttcttgg 840  
 aaaaaatgtg gtctttcata actagtttta taccagattc taaatatttg ttgaagtgtc 900  
 atagtttctt aatcctaatt agtataattg attattagca aatttttcca ttgtcaagat 960  
 attattttta ttgccagcta aaattactat tttcatttgc atcacaaaan tottaagtgg 1020  
 tttggtaaaa tataaaaaa tcacaaaact tccctcga 1058

<210> 28  
 <211> 1353  
 <212> DNA  
 <213> Homo sapiens

<400> 28  
 ccacgcgtcc ggggatctgg ggtcaggcag cccggggggc ttggagagac ttccagagga 60  
 ggcgcgact cggtagcgcg gcgggcaagg caggcgccat gacctgatt gaaggggtgg 120  
 gtgatgaggt gacgctcctt ttctcggtgc ttgcctgect tctggtgctg gcccttgctc 180  
 ggggtctcaac gcacaccgct gagggcgggg acccactgcc ccagccgcta gggaccccaa 240  
 cgccatccca gccagcgca gccatggcag ctaccgacag catgagaggg gaggccccag 300  
 ggccagagac cccagcctg agacacagag gtcaagctgc acagccagag ccagcacgg 360  
 ggttcacagc aacaccgcca gcccggact cccgcagga gccctcgtg ctacggctga 420  
 aattcctcaa tgattcagag caggtggcca gggcctggcc ccacgacacc attggctcct 480  
 tgaaaaggac ccagtttccc ggccgggaac agcaggtgag actcatctac caagggcagc 540  
 tgctaggcga cgacacccag accctgggca gccttcacct cctcccaac tgcgttctcc 600  
 actgccacgt gtccaagaga gtcggtcccc caaatcccc ctgcccgcgg ggggtccgagc 660  
 cccggccctt ccgggctgga aatcggcagc ctgctgctgc cctgctgct cctgctgttg 720  
 ctgctgctct ggtactgcca gatccagtac cggcccttct ttccctgac cgccactctg 780  
 ggccctggcg gcttcacct gctcctcagt ctectggcct ttgcatgta ccgcccgtag 840  
 tgccctccgg ggcgcttggc agcgtcgccg gcccctccgg accttgctcc ccgcccggcg 900  
 gcgggagctg ctgcctgccc aggccgcct ctccggcctg cctcttcccg ctgccctgga 960  
 gccagccct gcgcgcgaga ggactcccgg gactggcgga ggccccgcc tgcgaccgcc 1020  
 ggggctcggg gccacctccc ggggtgctg acctcagcc cgactggga gtgggtcct 1080  
 cggggtcggg catctcgtgt cgctgcctcg gccccgggca gagccgggccc gccccggggg 1140  
 cccgtcttag tgttctgccc gaggaccag ccgcctccaa tccctgacag ctcttggggc 1200  
 tgagttgggg acgccaggtc ggtgggaggc tgggtgaagg gagcggggag gggcagagga 1260  
 gttccccgga acccgtgcag attaaagtaa ctgtgaagtt ttcaaaaaaa aaaaaaaaaa 1320  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1353

<210> 29

105082-013007

<211> 1078  
 <212> DNA  
 <213> Homo sapiens

<400> 29  
 ggagctcgcg cgcctgcagg tcgacactag tggatccaaa gaattckgca cgagcacacc 60  
 tgkgcagggtg gaagtggatg tggacgagca ggcctcggcg gaaggtgggtg gggctctgctc 120  
 ctccacacctg caggcagccc tgggggaaat gctgccctcc ccacccccca gggctctgag 180  
 tgtggagggcg aggggcagga atggcgctccc tcaggagcca gcatggccct ggagcccccg 240  
 agtccctgag gaaagtgttg atgcctcca gcatggggct ccttctcctc ctgtacgccc 300  
 ggctgccacc cagcctgggtg ggccaggcag gcaggtggat aggggtgggca ggccgggag 360  
 gggggcaggc ggtcaggcag ccctctccca cagtccctcat cgacggcggtg gagtgcagcg 420  
 acgtcaagtt cttccagctg gccgcgcagt ggtcctcgca cgtgaagcac ttccccatct 480  
 gcatcttcgg acactccaag gccaccttct agccccacc accagggggc ccacctcctg 540  
 cccatgctg tgagggggccc agctgcattt ctgttaacat ttcagtttac tacagagaca 600  
 gacgcttaaa acacaaagag aaacagtctt aagtatgaat gtgctcaca cgtggaaact 660  
 aacgggggag ctccctgccag gagccgaata actgctctgc ttattaaccc gaacgttcgg 720  
 cccggggctg ggaagccaga aggacgatgc tgagccatgg atcgcggaag gcgtcctctg 780  
 gcctcaggag ccaccagag cctcacaggc tgagttcttg cctctgtgtc ctgtcccttc 840  
 tggaaagtcag gactctgctt cctcagggag cccgggggag gcggagctca gtggccacag 900  
 gccgagggcc atggggccgc tcagtcocgt tgggggtgtc ctgagttgag cctggggggg 960  
 ccgtcctgcc cgcctaagag atgccccag caccgcacac tcgtggttcc caataaactc 1020  
 ctsctcgcg cggaggtttt atagcaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaa 1078

<210> 30  
 <211> 2412  
 <212> DNA  
 <213> Homo sapiens

<400> 30  
 ggacagagct taatctcgtc gcgtgctgat ctctggcctt tccctttagt ctgtccgagt 60  
 ctcccctttt gggacatcat tcttcttctg atgctgccag gagaogctct gtctcttct 120  
 tcccagctccc ccaggacaat gtggatgctc atcctgggtc tggtaaagaa gtgagggtag 180  
 cagctactgc cttgtgtgtc ttogatgcac atgatgggga agtcaacgct gtgcagttca 240  
 gtccagggtc ccggttactg gccactggag gcatggaccg cagggtttaag ctttgggaag 300  
 tatttggaga aaaatgtgag ttcaagggtt ccctatctgg cagtaatgca ggaattacaa 360  
 gcattgaatt tgatagtgtc ggatcttacc tcttagcagc ttcaaatgat tttgcaagcc 420  
 gaatctggac tgtggatgat tatcgattac ggcacacact cacgggacac agtgggaaag 480  
 tgctgtctgc taagttctctg ctggacaatg cgcggattgt ctcaggaagt cacgaccgga 540  
 ctctcaaaact ctgggatcta cgcagcaaaag tctgcataaa gacagtgttt gcaggatcca 600  
 gttgcaatga tattgtctgc acagagcaat gtgtaatgag tggacatttt gacaagaaaa 660  
 ttogtttctg ggacattcga tcagagagca tagttcgaga gatggagctg ttgggaaaga 720  
 ttactgccct ggacttaaac ccagaaagga ctgagctcct gagctgctcc cgtgatgact 780  
 tgctaaagtg tattgatctc cgaacaaatg ctatcaagca gacattcagt gcacctgggt 840  
 tcaagtgcgg ctctgactgg accagagttg tcttcagccc tgatggcagt tacgtggcgg 900  
 caggctctgc tgagggctct ctgtatatct ggagtgtgct cacagggaaa gtggaaaagg 960  
 ttctttcaaaa gcagcacagc tcatccatca atgcggtggc gtgggtcgccc tctggctcgc 1020  
 acgttgtcag tgtggacaaa ggatgcaaaag ctgtgctgtg ggcacagtac tgacggggct 1080  
 ctccgggctg ggaggacccc agtgccctcc tcagaagaag cacatgggtc cctgcagccc 1140  
 tgtcctggca ggtgatgtgc tgggtatagc atggacctcc cagagaagct caagctatgt 1200  
 ggcaactgtag ctttgcctgt aatgggattt ctgaagattt gactgaggtc tctctgggc 1260  
 tggagaata acactgaaaa aacctgacgc tgcggtcact tagcagaggc tcaggttctt 1320  
 gccttgggaa acactactag ctctgacctt ccataacctc cttgggggag cacagggccc 1380  
 cgtggggcct cctcaccaac ggcagtgcca aaatcagccc ccacatcaag gtggtgttct 1440  
 ctgtgctttc tctcgtcctt ccaaagtcgg ttctggccta acgcatgtcc caacaccttg 1500  
 ggttccattt cccggtgaac tcaactttaag cattggatta acggaaactc ccgaactaca 1560  
 gacccctccc tgggtgggtg catgaatgtg tctcattact gctgaaatgt cctcacatct 1620  
 ctttcaactg tcttcagagc tttctggctc tctttccccc acaaaattcg acatatttaa 1680  
 aaatctccgt gtggctttta aaaatgggtt tttgtttttt tgtttttttt aggtgggaga 1740  
 ggatgtgtga aaatcttttc cagggaaatg ggttcgctgc agaggtaaag atgtgttct 1800  
 gtatcgatct gcagacaccc agaaggtggg tgcacactgc atgcttgggg gtgccaaggg 1860  
 attcgagacc tccaacatac ttgtctgaag ttggtgattc tggccatggc cctctcgcca 1920  
 agcctgtgtg cgatgccctt ggtgctttag tgcaagaagc ctaggctcag aagcacagca 1980  
 gcgccaatct tccgtttcag gggttgtgat gaaggcaag gaaaaacatt tatctttact 2040  
 attttaccta cgtataaagt tttagttcat tgggtgtgag aaacacctt tttatcact 2100

10050882.014002

ttaaatttgc	actttatttt	tttttttcca	tgcttgttct	ctggacattt	ggggatgtga	2160
gtggttagagc	tggtgagaga	ggagtcaggt	ggccttccca	ccgatgggtcc	tggcctccac	2220
ctgccctctc	ttccctgcct	gatccacgct	ttccaatttg	cccttcagag	aacttaagtc	2280
aaggagagtt	gaaattcaca	ggccagggca	catcttttat	ttatttcatt	atgttggcca	2340
acagaacttg	attgtaaata	ataataaaga	aatctgttat	atacttttca	aaaaaaaaa	2400
aaaaaaaaaa	aa					2412

<210> 31  
 <211> 1736  
 <212> DNA  
 <213> Homo sapiens

<400> 31						
cggtccggaa	ttcccgggtc	gacccacgcg	tccggtcagt	ttctctggaa	tgccaaaata	60
aggggaatttt	gttgtggctg	tcctatgaaa	atgaagctct	gtcacagaga	agtgtgtgag	120
ccaaatccaa	atactgagtt	tattttactg	tccaaataga	atattttcac	cccagtgaag	180
caattgtaag	catctcatcc	aaagcatatt	cactatcctt	gagtattctt	ggttgcttat	240
tgaatgaata	agtgaatgag	gtggatttgg	ctgacactaa	cctttgggat	tacctcacag	300
cttgccagtg	gcaagcttag	taagtactgg	gccatagtgt	ttgaggatag	gtctctagag	360
tcatatgtct	ctaagtccaa	atgctagcct	cctgtattag	tctgttttca	tgctgttgat	420
gaagccatac	cccagactgg	gtaattttaca	aaataaaggg	ttttaattgg	acttacagtt	480
ccacttcact	ggggaagcct	cacaatcatg	gtggaaggca	agaaggagca	agtcacatct	540
tacgtggatg	gcagcagaca	gaaagtatga	gagccaagca	aaatggattt	ccccttatga	600
aaccatcaga	tcttgtgaga	cttatttcact	accatgagaa	cagtatgtgg	aaaactgccc	660
ccatgattca	actaatctcc	cactgggtcc	cttccaccca	caacatgtgg	ggattcaaga	720
tgagatgtgg	gtggggacac	agccaaacca	tatcacctcc	tttccctagt	gcttggtttg	780
gaagagttat	gtaattcttt	tgagcttcaa	tttccctcat	tataaaatag	ggaagatgct	840
agttactctc	ttatagggta	gttatgattt	attttatgtg	aaatgttttag	aatggtccat	900
gccatgatgt	actgcagttg	gtttgtactg	gctcacatgt	accaatagta	cacctttttt	960
ctgattctctg	caatcttccc	atcctcacat	ccagtgcacat	catattggta	gtttgaaatt	1020
aattggccat	ggtgagaata	tttacctac	agatatttgc	aaatcctatc	accaggggct	1080
agctttgcca	gcacaccgtt	ggttagatga	catccgtaag	ttctgtataa	atcttaacat	1140
tattattact	cagtaggtac	tcctgtctcc	ttatggtttt	gagaaggcct	tccttctagt	1200
taaataaatc	attttgaatt	aaaataacac	tgatgggact	cttagcaatg	ttttacctct	1260
tgggaatcac	tgccctacatt	tgtgtgtctat	aaatctgaat	ccttaattca	ctcggattga	1320
tttttggctc	cgtgaagcag	gagcttttct	cactgctgta	gccccacac	atggcacagg	1380
cctgggacag	agtaagcact	cataagtatt	tgtaagtga	aaaaataaat	gaatgaaagt	1440
atcccaaaca	cttgcatttt	caaaagggtt	tgacatccac	ttccttttct	tctcaaagta	1500
cgctttgaga	tggataggtc	ctatttttacc	tctattgcac	cgatgaagaa	actgcaatgc	1560
aaagaagtgt	ctaatttagtc	atttgtctcc	tttcatcaaa	tatgtccatt	acaccagtgt	1620
ttctcaaaat	gtgttccata	gatcataaat	cctgaaggat	gttaatagtt	attatgtgcc	1680
aggggacccg	tggatatata	agtttggaaa	atagtgaagt	aaaaaaaaa	aaaaaa	1736

<210> 32  
 <211> 2287  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1370)  
 <223> n equals a,t,g, or c

<400> 32						
ggactattct	aaatatatt	gtattaaaaa	ggaaaaataca	acaaaatgta	tatttagaca	60
cgagctttaca	tggcatacct	tatatattgt	tcattcttta	aagttttacaa	aaaaaaacct	120
tatgtttttta	tgtaatcagt	cattacacta	gggagaaaatt	tatcagcttt	agttctaaat	180
atgctcatga	ggtataaaa	ctattttctc	atcagtatatt	tgctttttatg	ctgcttttttc	240
tttttgatac	tcagggttta	taaactatct	tttaaaatatt	taagccagga	cttcaaaaaa	300
tgtagagtac	tgttttggcg	ttccctacct	tcattctctt	agggttaagg	agcctttctt	360
tctgcagcta	agggcagagg	ctgtgcctag	ggctataacca	ccactagcat	ctgtatttga	420
gactgtttcc	ttagatgggt	aagaggtgga	aaacaaactt	agtatcaggg	gtccatgaag	480
cccattggcat	catttttgaa	aatattttcta	gttttgttagc	caaagcaatt	ggtttagtaa	540
aatgagactt	cttcaggagt	cmctccttta	ctgtggaycc	attgcttagt	gggaatggaa	600



gtatatgtat ctatcttgkg tattaaacttc tgacttattt atacaagagc agctatagga 660  
 gtttacaaaa gaactttaag ttattaagtt actataaatt tggggatcct agagtgatct 720  
 taaatatggc aagatacagc tcatttagaa taaaatctca catccattat tttaaaggga 780  
 atgattgggg ggaaaaactg gtgaagaaga aatataaaaa ggaccctaaa aagaattctg 840  
 caaaaataaga gaagaaataa tttgtgacag gtaatagaat actagtagga tagaaacaac 900  
 tagaaaaggaa agtgtgacac agttttttaa tttagatgta gaaaataatg aattaatgag 960  
 attggtgaaa ggaaatcatg caaaacattt gaatgcaaag cttttctaac aaaaagtgc 1020  
 tggagcactt gccattgcaa caaccctgtt tttgcaatta ggtttttgac tgttaaaatg 1080  
 gatattttca taaaamtggg gttctgaatt ttgctacagg gctgcttaaa tttatgatta 1140  
 cctgtagaca cttgatattt acatagatta cagctttggg aatatgtcac tggagtaatt 1200  
 acgctgtaat acctgttgag aattcatacc atctgatgct tatatattaa tttcttatgt 1260  
 ttgtaagttt ggctttgggg aataggtgtg gagaaattaa agagtgaagg ccatatttca 1320  
 ttttttataa attatctttc aagctcagat agcttaagag cagttttatan taaggagacc 1380  
 cttttctcct tgaggatagg gataggtaag gtaaaacttg aaaaaggatg tcacagaagt 1440  
 cacttttttaa ttaagtcatt attgagatac tgaactcttc cactcattct tctttcccat 1500  
 tttcctatta tgtttgataa ttatatgtat ttttaaaaac tgtgagaggg aaaattagtc 1560  
 ataacccttt tgggttatcc acttaaaattt aggtattttc atattactca ggtaaagatg 1620  
 gaaatgacag agcacagmca tttatttttt aaattgatag ggtagaaaat gaaatgtact 1680  
 yctgtttatt ctttaacta tatatatata cacacatagt tttagcaa at tggaaataat 1740  
 atattcattt gtatggcaag ataaatgcag tcattctaat actagtctat acatttttgc 1800  
 caaatggcgc aaatatacct ccatatttat tttacaaaaa gtgccgtata tacatatgta acaggtgagt 1860  
 gaccatgtat gagacacttt tttacaaaaa gtgccgtata tacatatgta acaggtgagt 1920  
 gtgtgtttaa cataatttat aattatttct gtcagtacag cgtatatgga aaattcaagt 1980  
 tgtttttaac atattcaagt atgttcagta taaaataagt taatccatt tcataatgta 2040  
 aatcataatt ttgttatttg ccatatttta tttgaagtga taaaatttta taactcaaat 2100  
 ttgaatgtca tagtacattg tgtgctaacc atggcagca aacatttaca tttgtttttt 2160  
 acaataaatt tcttttaaaa tatactttct atttttctgt actgacatat gcaataaatt 2220  
 ggtacattaa aaatttgatt aatgtcttca aaaaaaaaaa aaaaaaaaaa aaaaaaggg 2280  
 cggccgc 2287

<210> 33  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
 ggaaaagaaa tttgtatata gcccaaactt aagactgtct caccagagct taaagggtgtt 60  
 agctctggcc acagcagcgg cctcagtcac tcttcttaca tggattttga tgc aaattct 120  
 gtccttttct tatttctcaa gatttctagc ccttcgagg ggcccaacc tcgaaggagt 180  
 ccagtaaaatg tgtaactcca ctctgccttg cctgtgctga aaacacatag aaagaggaa 240  
 agaggaggca ggcacctgga ggtcagaatg gcagctggat tgtgaagaag gtgtggtttg 300  
 catgcctggc agtgatgagc ttcttaggct tcattcttaa cctcggagca agactcattg 360  
 tccagccaca agcagcgttg gctccagag gcctccgtgg gcagggectg ccctgtgaaa 420  
 ctgaggtctg caagagaacc ttgagaccag gtgccgtggg ctggctggtt cacaaggaa 480  
 gacgggctct atccatttcc aggaagagcg ccctgtgtct cctgggagta atgtatgtgg 540  
 gaccaggcaa gaggccagga gtggtgagga aacattccct tcttgtgaaa atgcaagcga 600  
 ggggaaagga ggtttccccc acaatgtgct agaataattca tccagcctgg ttgacagagc 660  
 gagactccgt cccaaaaaaa aaaaaaaa 688

<210> 34  
 <211> 995  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (960)  
 <223> n equals a,t,g, or c

<400> 34  
 gggaagcaat gtggctcctg tgtgtggcgt tggcggtctt ggcatggggc ttcctctggg 60  
 tttgggactc ctcagaacga atgaagagtc gggagcaggg aggacggctg ggagccgaaa 120  
 gccggaccct gctggtcata gcgcaccctg wkatgaagc catgtttttt gctcccacag 180  
 tgctrggcct ggcccgcccta aggcactggg tgtacctgct ttgcttctct gcagttttcy 240

gtagggagct	aagtgaatac	accgaagtct	tacctctgaa	cccctcacag	cctagggaca	300
ggagcggcgcg	gcttacctgg	tgggttgggg	gacgtcgga	gctcgcgtac	tacgccagca	360
ggattgagga	gcagagaaac	agttgcagtt	ggttggtattc	agtacctgca	tttccgttgg	420
gaactccacc	tgtacttggt	attctgtgga	actttttttt	atttgtagaa	ggagcaagaa	480
tattgacctt	actatatagc	acacgaaaca	atctatgctg	tatygtgcct	gctcaatcct	540
taaagttaac	ttctaattgat	agtaaaagac	cttcctgctg	cctttaaaat	gcagcttgtg	600
ctagtaacat	gcatgtgtca	aattgaagaa	ttagacatag	atgactagat	agaaagtaat	660
tttgtaggta	attttagagt	tcaactccac	ccagcttttca	gtgaagggaac	ctttcaaata	720
atagattttt	gcttaccata	gagaaaagat	caaatagaca	agcaaataatt	gaccattaag	780
ctggaatatg	gtgataattg	aacagttgta	taaatgaagt	aattgaattg	tacacatata	840
atgggtgaat	tttatggcat	gtcaaagtat	acctcaataa	agctattttt	ttaaattgcc	900
caaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	960
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaa			995

<210> 35  
 <211> 765  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (671)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (680)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (683)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (699)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (740)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (765)  
 <223> n equals a,t,g, or c

<400> 35						
gttttttttt	tttttttttt	ttagaaatac	tagaattttct	tcctttctcc	atgtttacct	60
gacatataat	attctttcaga	aaatggagca	cattagcggtt	tataattcca	tactccagtg	120
tttctggcat	aattttccata	gcttccttca	tgtcggtagc	ttcagagatt	gcctctttgg	180
tattttctgag	gaaaaacacc	acgttttggg	ccaggaactc	ctcgggaaga	ggggtacaga	240
gcatgtggag	atgcatcttt	tccatgatgt	gcttcgcagt	tcttttggaa	gggagttttt	300
ctgaaatctc	tttgtccatt	tcttcaccc	ctctgttttag	aggttggcct	agagattcgg	360
ttctcagtg	cacacgctta	gctcgcactt	tatccacgga	ctccactttt	tgagaataag	420
tctctttctt	ctctttctccc	tcttcagaca	ggacaggtat	ctcatcaatc	tccacctcca	480
cctcctccgg	caccatagtg	cggttagatga	agagcgccga	gggcccctcc	tcctcgcctg	540
cctgggttgag	gaagtgcgaag	atgaggtcct	cgccctggcc	gtcgtcgcgg	ttgagcaggt	600
cctcgaaaag	ctggggggtcg	gtgatgccga	aagccgcata	cacgcgcggc	acgaaggggg	660
gggcccggta	nccaatccgn	ccnataagtg	agtcgtatna	caaattcact	gggcccgtcgt	720
ttacaacgtc	gtgactgggn	aaaacctggc	ggttaaccga	aactn		765

208710-23305007

<210> 36  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<400> 36  
 gaaacctcag gcaagttcct ggccatcccc aggcctcatt ttcccatcag gaagaaggaa 60  
 ataagcacac ctgtctcccc agtctccctg cctgggtcac tgggcaggca aatgtgtggg 120  
 aggtgattgc aaaggtacca gatttgccaa atatacgctt gcaattaaat ccaaaggcct 180  
 gtcccacagt tgcttgactt tttttaaaagg ccaatttatc ctccctttctt aaagactaaa 240  
 caatttttcc acttcattta ttaaaataaa gctctttaac ttgcacgctt ttagacaaaa 300  
 gcaacagtac tctgaaatga ccccatcact tctcagttag aagctgtgct ccctgttctt 360  
 tgtgtcttctt gggattgcaa gtgcggcctt tgtgagtgtc ctgtgggcct ggagcagcca 420  
 cacggaaaagg ctacacagctg aaccacagcag tagcatcacc tgcctttccc caccctgggt 480  
 ttttttccct ttctaatttg gggctcctct atagctcctc aaatacaatg tactcgtgtc 540  
 cctcagagcc actgcacaga ctgtccctct tccctaaaga gaccccgctc ttatcctccc 600  
 cctcccttac ccmacccagt cagccagctg aactctgggt catcttctgc atccgggtga 660  
 aaggtcacct tccttgccag tcaaccccca cctctccact gcagtcacat gagatgagca 720  
 gcctctaaaa cctgcctctg ag 742

<210> 37  
 <211> 2750  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1879)  
 <223> n equals a,t,g, or c

<400> 37  
 ggacgtcgtc gcctcagcgc cggctccccg cggggccgcg gccgcgcgacc gttgagccgc 60  
 cggctgagcc gcctgctgaa gtccctccct caggaaacccc tccgccacccc tccacctccg 120  
 aaccgctctc gggcgccgca cccatgtggg ggttcagggt cctgcgggtcg ccgcccgttg 180  
 tgctcctgct gccgcagctc ggaatcggaa acgcctcgtc ctgctctcag gccagaacca 240  
 tgaaccgggg cggcagcggc ggccgcgcgat gctccctctc ggccgaggtg cgccgcgctc 300  
 agtgccctgca gctttccacc gtgcctggag ccgacccgca gcgcagsaac gaattgctcc 360  
 tggtggcggc ggccggggag ggactggagc ggccaggacct ccccgggggac ccagcgaagg 420  
 aggagccgca gccgcgcgcc cagcatcacg tctctctatt ccctggggat gtgcagaatt 480  
 accatgaaat tatgactcgt catcctgaga attatcaatg ggaaaactgg agtctagaaa 540  
 atgttgctac catttttagcc caccggttcc ccaatagtta tatgtgggtg ataaaaatgtt 600  
 cccgaatgca tttgcacwwa ttcagctgct atgacaattt tgtgaaaagt aacatgtttg 660  
 gtgccccaga acacaatact gactttggag cttttaagca ctttttatatg ttattagtta 720  
 atgcttttaa ttttaagtcag aatagtttat caaagaaaag tttgaatgtt tggaaataagg 780  
 actccatgac atctaactgt agatccagtc cttctcatac tacgaatggt tggcagggag 840  
 aaaaagttag gacctgtgaa aaatctgatg agtctgccat gagtttttat ccaccatcac 900  
 taaatgaygc atcttttact ttgattggat tcagtaaaagg ttgtgttgkt ttgaatcagt 960  
 tgctttttga attgaaagaa gccaaagaa acaagaacat agatgctttt atcaaaaagca 1020  
 taagaacaat gtattggctg gatgggtggc attctggagg aagcaatact tgggttactt 1080  
 atccagaagt cttgaaagaa tttgcacaaa caggaaattat cgttcacact catgtaaacac 1140  
 cttaccaagt acgtgatcca atgagatctt ggattggaaa ggagcmcaag aaatttggtc 1200  
 agatacttgg ggatcttggg atgcagggtga ctagecaaat tcattttaca aagggaagctc 1260  
 cttccataga gaatcacttc aggggttcag aagtattttg agattacagg tatattaatg 1320  
 aacttggtca gtggaagaac ataagcactt ttgagtgtta taaattcaga taatgggatg 1380  
 taattcatag ctgcattgtc agttttgggg tatgggggga agcacacatt cctaaaatgt 1440  
 gagtgtaatg tgcaatagta ttttttgctt gtgaatgtga gcagttatta atttggtattg 1500  
 agttagaatt agttaatttg aaatctaaca aggtgggttg taataatgct gaggagatat 1560  
 aagaccctta aaatgaaagt tacaacattg ttcttataaa aggttaactaa aattgttact 1620  
 gttggaataa actgattttc tgagtaatgt tttaaactaa tttggtgaca ttttaacagt 1680  
 aattagctat tttgagtggg aatattttca tttctcttca aacaaaagca aaggtacgat 1740  
 gctgttttct atcatttttg aataactgca cctgcctttt tgtgtttttg taaactcctt 1800  
 gactcattct ttcattgtgc accaagtact tttctcatra gagtcamcat atatttggtt 1860  
 ccaaagtgtc acaagtgtnc aatagtgtta aggtgggttt taaaamcata gccaggtgtg 1920  
 gtggcacgtg ccttttagttc cagctactca ggaggctaag gcagraggat tgcttgagcc 1980  
 caggctgtgt ggttcaccat aattgtgttt gtgactagct actgcactcc aacctgggca 2040

acatagtggg	acttcatctc	taaaacaaaa	caaaacaaaa	ttacacttaa	gcactattgt	2100
ttaattttta	attgtcagtt	tatcattatt	ttgggtaaga	cattctgggg	tttcttgaat	2160
cttgtccaaa	aaccagttgt	tttggaaaaa	tgcttttaaa	tgagcatatt	tatgtatatt	2220
ggataaaaaa	gtactacaga	gcaaatttca	aatttttcat	tatatcagtc	tttttgaaa	2280
gatcaacttg	gataaaaata	atatataatg	ctctatttgt	tagagctcta	ttaaaaagga	2340
aacagattcc	atagatctaa	gtcaatgttt	ctccagaagc	atgattttgt	ctgccaaaag	2400
aaaatagctc	tctttggcca	aaatgcaaaa	ttacattgct	ataagaaaag	ttacaaggga	2460
aagtttgaag	acacaaatga	tttaattttg	gctcaaaaac	tgaatttgct	taacactgct	2520
acataatttg	ggtgaagttt	ccttctgccc	gtttttcttg	acctagataa	atacactttg	2580
agaaatccag	atctaataaa	tgtcaaccaa	cattgacatt	gtaattgggt	gattacaata	2640
aaaggtgagc	agtttggtgt	ttattaataa	ttagcttttg	caggtaatga	aatagcaggg	2700
aagtaacatg	ctgcttttag	actaaaaaaa	aaaaaaaaaa	aaaaactcga		2750

<210> 38  
 <211> 1538  
 <212> DNA  
 <213> Homo sapiens

<400> 38						60
cgcagcttga	tggcgtcggg	ctggagagcc	gcagtcgccg	ctgcagcacc	tgggagaagg	120
cagaccgtgt	gagggggcct	gtggcccagc	gtgctgtggc	ctcsggggagt	gggaagtggg	180
ggcaggagcc	ttccttacac	ttcgccatga	gtttcctsat	cgactccagc	atcatgatta	240
cctcccagat	actatttttt	ggatttgggt	ggcttttctt	catgcgccaa	ttgtttaaag	300
actatgagat	acgtcagtat	gttgtagagg	tgatcttctc	cgtagcgttt	gcattttctt	360
gcaccatggt	tgagctcatc	atcctttgaa	tcttaggagt	attgaatagc	agctcccgtt	420
attttctactg	gaaaatgaac	ctgtgtgtaa	ttctgctgat	cctgggtttc	atgggtgcctt	480
tttacatttg	ctattttatt	gtgagcaata	tcgactact	gcataaacia	cgactgcttt	540
tttcctgtct	cttatggctg	acctttatgt	atttcttctg	gaaactagga	gatccctttc	600
ccattctcag	cccaaaacat	gggatcttat	ccatagaaca	gctcatcagc	cgggttggtg	660
tgattggagt	gactctcatg	gctcttcttt	ctggatttgg	tgctgtcaac	tgcccataca	720
cttacatgtc	ttacttcctc	aggaatgtga	ctgacacgga	tattctagcc	ctggaacggc	780
gactgctgca	aaccatggat	atgatcataa	gcaaaaagaa	aaggatggca	atggcacgga	840
gaacaatggt	ccagaagggg	gaagtgcata	acaaaccatc	agggtttctg	ggaatgataa	900
aaagtgttac	cacttcagca	tcaggaagtg	aaaatcttac	tcttattcaa	caggaagtgg	960
atgcttttga	agaattaagc	aggcagcttt	ttctggaaac	agctgatcta	tatgctacca	1020
aggagagaat	agaatactcc	aaaaccttca	aggggaaata	ttttaatttt	cttgggttact	1080
ttttctctat	ttactgtgtt	tggaaaattt	tcatggctac	catcaatatt	gtttttgatc	1140
gagttgggaa	aacggatcct	gtcacaaag	gcattgagat	caactgtgaat	tatctgggaa	1200
tccaatttga	tgtgaagttt	tggtcccaac	acatttctct	cattcttggt	ggaataatca	1260
tcgtcacatc	catcagagga	ttgctgatca	ctcttmccma	ggtgatacta	tgaccatgag	1320
tagcatcagc	cagaacatga	gagggagaac	taactcaaga	caatactcag	cagagagcat	1380
cccgtgtgga	tatgaggctg	gtgtagaggc	ggagaggagc	caagaaacta	aaggtgaaaa	1440
atacactgga	actctggggc	aagasatgtc	tatggtagct	gagccaaaca	cgtaggattt	1500
ccgttttaag	gttcacatgg	aaaaggttat	agctttgcct	tgagattgac	tcattaaaat	1538
cagagactgt	aaaaaaaaaa	aaaaaaaaaa	gggcggcc			

<210> 39  
 <211> 5065  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2531)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (5063)  
 <223> n equals a,t,g, or c

<400> 39						60
tttttttttt	tttctttttc	tatgggttat	tttttattwt	ttttawtttt	atttwtatt	120
atactttaag	ttttagggtg	catgtgcaca	atgtgcaggt	tagttacata	tgtatacatg	

tgccatgctg	gtgygctgca	cccaytaact	cgatcatytag	cattaggtat	atctccyaat	180
gctatccctc	ccccctcccc	ccacccacaca	acagtcccca	gwgtgtgatg	ttccccttcc	240
tgtgtccatg	tgwtctcatt	gttcaattcc	cacctatgag	tgagaayatg	cggtgttttg	300
ttttttgtyc	ttgcgatagt	tttctgagaa	tgatgrtttc	caryttcatc	catgtcccta	360
caaaggacat	gaactcatca	ttttttatgg	ctgcatagta	ttccatgggtg	tatatgtgcc	420
acattttctt	aatccagtct	atcattgttg	gacatttggg	ttggttccaa	gtctttgcta	480
ttgtgaatar	tgccgcaata	aacatacgtg	tgcatgtgtc	tttatagcag	catgatttat	540
artcctttgg	gtatataccc	agtaatggga	tggtctgggtc	aaatgggtatt	tctagttcta	600
gatccctgag	gaatcgccac	actgacttcc	acaatgggtg	aactagttta	cagtccacc	660
aacagtgtaa	aagtgttcct	atttctccac	atcctctcca	gcacctgttg	tttctgact	720
ttttaatgat	ygccattcta	actggtgtga	gatgggtatct	cattgtgggt	ttgatttgca	780
tttctctgat	ggccagtgat	gatgagcatt	ttttcatgtg	tyttttgggt	gcataaatgt	840
cttcttttga	gaagtgtctg	ttcatatcct	tygcccactt	tttgatgggg	ttggtttggt	900
ttttcttgta	aatttggttg	agttcwtgtg	agatttctga	tattagccct	ttgtcagatg	960
agtagrttgc	aaaaattttc	tcccattytg	taggttgctt	gttcactctg	atggtagttt	1020
cttttgcgtg	gcagaagctc	tttagtttaa	ttagatccca	tttgtcaatt	ttggcttttg	1080
ttgccattgc	ttttgggtgt	ttagwcatga	agtccttgcc	catgcctatg	tcctgaatgg	1140
tattgcttag	gttttcttct	aggtttttta	tggttttagg	tctaaccattt	aagtctttaa	1200
tccatcttga	attaattttt	gtataaggtg	taagggaagg	atccagtttc	agctttctac	1260
atatggctag	ccagttttcc	cagcaccatt	tattaaatag	ggaatccttt	ccccattkct	1320
tgtttttstc	aggtttgtca	aagatcagat	rgttgttagat	rtgygyrrtt	atctctgagg	1380
gctctgttct	gttccattgr	tctatatctc	tgttttggta	ccagtaccat	gctgttttgg	1440
ttactgttag	cttgttagtat	agtttgaagt	caggttagyrt	gatgcctcca	gctttgttct	1500
tttggcttag	gattgacttg	gcratgcggg	ctcttttttg	gttccatatg	aactttaaag	1560
tagtttttct	caattctgtg	aagaaagtca	ttggtagcct	gatggggatg	gcattgaatc	1620
tataaattac	cttgggcagt	atggccattt	tcacgatatt	gattcttctc	acccatgagc	1680
atggaatggt	cttccatttg	tttgtatcct	cttttatttc	mttgagcagt	ggttgttagt	1740
tctccttgaa	gaggtccttc	acatcccttg	taagttggat	tcctaggtat	tttattctct	1800
ttgaagcaat	tgtgaatggg	agttcactca	tgattttggct	ctctgtttgt	ctgttrttgg	1860
tgtataagaa	tgcttgtgat	ttttgcacat	tgattttgta	tcctgagact	ttgctgaagt	1920
tgcttatcag	cttaaggaga	ttttgggctg	agacratggg	gttttctaga	tatacaatca	1980
tgtxctctgc	aaacagggac	aatttgactt	cctcttttcc	taattgaata	ccctttattt	2040
ccttctcctg	cctrattgcc	ctggccagaa	cttccaacac	tatgttgaat	aggagtgggtg	2100
agagagggca	tccctgtctt	gtgccagttt	tcaaagggaa	tgcttccagt	ttttgccccat	2160
tcagtatgat	attggctgtg	ggtttgtcat	agatagctct	tattattttg	agatacgtcc	2220
catcaatacc	taatttattg	agagttttta	gcattgaagg	ttgttgaatt	ttgtcaaagg	2280
ccttttctgc	atctattgag	ataatcatgt	ggtttttgtc	tttggttctg	tttatatgct	2340
ggattacatt	tattgatttg	cgtatrtrtg	accagccttg	catcccaggg	atgaagccca	2400
cttgatcatg	gtggataagc	tttttgatgt	gctgctggat	tcggtttgcc	agtattttat	2460
tgaggatttt	ttcatcaagg	ttcatcaagg	atattgtctc	aaaattctct	tttttkgttg	2520
tgctctgccc	nggcttttgt	atcaggatga	tgctggcctc	ataaaatgag	ttagggagga	2580
ttccctcttt	ttctattgat	tggaatagtt	tcagaaggaa	tggtaccagy	tcctccttgt	2640
acctctggta	gaattcggct	gtgaatccat	ctggctctgg	actytttttg	gttggttaagc	2700
tattrattat	tgcwcaatt	tcagakcctg	ttatttgtct	attcagagat	tcaacttctt	2760
cctgttttag	tttgggagr	gtgtatgtgt	cgaggaaatt	atocatttct	tctagatttt	2820
ctagtattat	tgcrtagagg	tgttttagtg	attctctgat	ggtagtttgt	atttctgtgg	2880
gatcgggtgg	gatatccctc	ttatcatttt	ttattgcgtc	tatttgatct	ttctctcttt	2940
tyttctttat	tagtcttgct	agcgggtctt	caatttttgt	gatcytttca	aaaaaccagc	3000
tcttggtatc	attrattttt	tgaagggttt	tttgtgtctc	tatttctctc	agttctgctc	3060
tgatttttag	tatttcttgc	cttctgctag	cttttgaaatg	tgtttgctct	tgcttttcta	3120
gttcttttaa	ttgtgatgtt	aggggtgcaa	ttttggatct	ttcctgcttt	ctcttggtgg	3180
catttagtgc	tataaatttc	cctctacaca	ctgctttgaa	tgylgtccag	agattctgggt	3240
atgttgtgtc	tttgttctgc	ttgggttcaa	agaacattct	tatttctgcc	ttcatttctg	3300
tatgtaccca	gtagtcattc	aggagcagggt	tgttcagttt	ccatgtagtt	gagcggtttt	3360
gagttagwtt	cttaatcctg	agttctagtt	tgattgcact	gtgggtctgag	agayagtgtg	3420
ttataatttc	tgttctttta	caatttgctga	ggagagcttt	acttccaast	atgtgggtcaa	3480
ttttggaata	gggtgtgggt	gggtgctgaa	aaaatgtata	ttctgttgat	ttgggggtgga	3540
gagttctgta	aggtccgctt	gggtccagagc	gtgtccagagc	tgagttcaat	tcctgggtat	3600
ccttgtrrac	tttctgtctc	gttgatctgt	ctaattgttg	cagtgggggtg	ttaaagtctc	3660
ccattattaw	tgtgtgggag	tctaagctct	tttgtaggtc	actcaggact	tgctttatga	3720
atctgggtgc	tctctgattg	ggtgcatata	tatttaggat	agttagctct	tcttggtgaa	3780
ttgatccctt	taccattatg	taattggcctt	ctttgtctct	tttgatcttt	gttggtttaa	3840
agtctgtttt	atcagagact	aggattgcaa	ccccgtcctt	tttttggttt	ccatttgctt	3900
ggtagatctt	cctccatccy	tttattttga	gcctatgtgt	gtctctgcac	gtgagatggg	3960
tttctgaat	acagcacact	gatgggtctt	gactctttat	ccaatttgcc	agtcgtgtgc	4020
ttttaattgg	agcatttagy	ccattttacat	ttaaagttaa	tattgttatg	tgtgaatttg	4080

atcctgtcat	tatgatgta	gctgggttatt	ttgctcgta	gttgatgcag	tttcttcta	4140
gyctcgatgg	tctttacawt	ttggcatgwt	tttgagaygg	ctggtagcgg	ttgttccttt	4200
ccatgttttag	ygcttccttc	aggagctcct	ttagggcagg	cctgggtggg	acaaaatctc	4260
tcagcatttg	cttgtctgta	aagkatttta	tttctccttc	acttatgaag	cttagtttgg	4320
ctggatatga	aattctgggt	tgaaaattct	tttctttaag	aatggtgaat	attggcccc	4380
actctcttct	ggctttagr	gtttctgccg	agagatccgc	tgtagtctg	atgggcttcc	4440
ctttgwggt	aaccogacct	ttctctctgg	ctgcccttaa	cattttttcc	ttcatttcaa	4500
ctttggtgaa	tctgacaatt	atgtgtcttg	gagttgctct	tctcgaggag	tatctttgtg	4560
gcgttctctg	tatttctga	atctgaaygt	tggcctgcct	tgctagattg	gggaagttct	4620
cctggataat	atcctgcaga	gtgttttcca	acttggttcc	attctcccr	tcactttcag	4680
gtacaccaat	cagacgtaga	tttggctctt	tcacatagtc	ccatatttct	tggaggcttt	4740
gytcatttct	ttttattctt	ttttctctaa	acttcccttc	tcgcttcatt	tcattcattt	4800
catcttccat	ygctgatacc	ctttcttcca	gttgatcgca	tcggctcctg	aggtctctgc	4860
attcttcacg	tagttctoga	ggggggggccc	ggtacccaat	tcgccctata	gtgagtcgta	4920
ttacaattca	ctggcgcgtg	ttttacaacg	tcgtgactgg	gaaaaccctg	gcgttaccca	4980
acttaatcgc	cttgcagcac	atcccccttt	cgccagctgg	cgtaatagcg	aagaggcccg	5040
caccgatcgc	ccttcccaaa	aance				5065

<210> 40  
 <211> 4709  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (14)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (18)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (30)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (34)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (177)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (2213)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (3846)  
 <223> n equals a,t,g, or c

<400> 40						
ataccccccc	tcntacngg	aacgacccan	ggangatttc	ctctttttct	atcgattgga	60
atattttcag	aaggaatggt	accagttcct	ccttgtagct	ctggtagaat	tcagctgtga	120
atccatctgg	tcctggactc	tttttggttg	gtaagctatt	gattattgcc	acaatwncag	180
agaacgccac	aaagatactc	ctcgagaaga	gcaactccaa	gacacataat	tgtagatttc	240
accaaagttg	aaatgaagga	aaaaatgtta	agggcagcca	gagagaaagg	tcgggttacc	300
cwcaaaggga	agcccatcag	actaacagcg	gatctctcgg	cagaaacyct	acaagccaga	360

20050322-01400

agagagtgagg ggccaatatt caacattctt aaagaaaaga attttcaacc cagaatttca 420  
 tatccagcca aactaagctt cataagtga ggagaaataa aatmctttac agacaagcaa 480  
 atgctgagag attttgtcac' caccaggcct gccctaaaag agctcctgaa ggaagcrcta 540  
 aacatggaaa ggaacaaccg gtaccagccr ctgcaaaawc atgccaawt gtaaagacca 600  
 tcgagrctag gaagaaactg catcaactaa cgagcaaaat aaccagctaa catcataatg 660  
 acaggatcaa attcacacat aacaatatta acttttaaatg taaatggact aaatgctcca 720  
 attaaaagac acagactggc aaattggata aagagtcaag acccatcagt gtgctgtatt 780  
 caggaaaccc atctcacgtg cagagacaca cataggctca aaataaargg atggaggaag 840  
 atctaccaag caaatggaaa acaaaaaaag gcagggggtg caatcctagt ctctgataaa 900  
 acagacttta aaccaacaaa gatcaaaaga gacaaagaag gccattacat aatggtaaa 960  
 ggatcaattc aacaagaaga gctaactatc ctataatat atgcaccaa tacaggagca 1020  
 cccagattca taaagcaagt cctgagtgc ctacaaagag acttagactc ccacacawta 1080  
 ataattgggag actttaacac cccactgtca acattagaca gatcaacgag acagaaagty 1140  
 aacaaggata cccaggaatt gaactcagct ctgcaccaag cggacctaata agacatctac 1200  
 agaatctctc accccaaatc aacagaatat acattttttt cagcaccac accatttcca 1260  
 aaattgacca catasttggg agtaaagctc tctcagcaa atgtaaaaga acagaaatta 1320  
 taacaaactr tctctcagac cacagtgcac tcaaaactaga actcaggatt aagaawctca 1380  
 ctcaaaaccc ctcaactaca tggaaactga acaacctgct cctgaatgac tactgggtac 1440  
 ataacgaat gaaggcagaa ataaagatgt tctttgaaac caacgagaa aaagacacaa 1500  
 cataccagaa tctctgggac rcattcaaa cagtgtgtag agggaaattt atagcactaa 1560  
 atgcccacaa gagaaagcag gaaagatcca aaattgacac cctaactca caattaaaag 1620  
 aactagaaaa gcaagagcaa acacattcaa aagctagcag aaggcaagaa ataactaara 1680  
 tcagagcaga actgaaggaa atagagacac aaaaaaccct tcaaaaaaty aatgaatcca 1740  
 ggagctgggt ttttgaaarg atcaacaaaa ttgatagacc gctagcaaga ctaataaaga 1800  
 araaaagaga gaagaatcaa atagacgcaa taaaaaatga taaaggggat atcaccaccg 1860  
 atcccacaga aatacaaaact accatcagag aatactayaa acacctctay gcaaataaac 1920  
 tagaaaatct agaagaaatg gataaattcc tcgacacata cacyctcca agactaaacc 1980  
 aggaagaagt tgaatctctg aatagaccaa taacaggctc tgaaattgw gcaataatya 2040  
 atagcttacc aacaaaaaar agtccaggac cagatggatt cacagccgaa ttctaccaga 2100  
 ggtacaagg ggartctggt ccattccttc tgaactatt ccaatcaata gaaaaagagg 2160  
 gaatcctccc taactcattt tatgaggcca gcatcatcct gataccaag ccnggcagag 2220  
 acacaamaa aaaagcaaat tttagaccaa tatccttgat gaacattgat gcaaaaatcc 2280  
 tcaataaaat actggcaaac cgaatccagc agcactcaa aaagcttatc cccatgatc 2340  
 aagtgggctt catccctggg atgcaaggct ggttcaayat acgcaaatca ataatgtaa 2400  
 tcagcatat aaacagaacc aaagacaaaa accacatgat tatctcaata gatgcagaaa 2460  
 aggcctttga caaaattcaa caacccttca tgttaaaaac tctcaataaa ttaggtattg 2520  
 atgggactrta tytcaaaata ataagagcta tctatgacaa acccacagcc aatattatya 2580  
 tgaatgggca aaaactggaa gcattccttc tgaaaactgg cacaagacag ggatgccctc 2640  
 tctcaccact cctattcaac atagtgttg aagttctggc cagggcaaty aggcaggaga 2700  
 aggaataaa gggatttcaa ttaggaaaag aggaagtcaa attgtccctg tttgcagayg 2760  
 acatgattgt atctctagaa aaccccatyg tctcagccca aaatctcctt aagctgataa 2820  
 gcaacttcag caaagtctca ggatacaaaa tcaatgtrea aaaatcacia gcattcttat 2880  
 acaccaataa cagacaaaca gagagccaaa tcatgagtga actccattc acaattgctt 2940  
 caaagagaa aaaataccta ggaatccaac ttacaaggga tgtgaaggac ctcttcaagg 3000  
 agaactcaaa accatgctc aakgaaataa aagaggatag aaacaaatgg aagaacattc 3060  
 catgctcatg ggtaggaaga atcaatatcg tgaaaatggc catactgccc aaggtaat 3120  
 atagattcaa tgccatcccc atcaagctac caatgacttt ctacacagaa ttggaaaaaa 3180  
 ctacttttaa gttcatatgg aacaaaaaaa gagcccgcat ygccaagtca atcctaagcc 3240  
 aaaagacaaa agctggagg atcacrtac ctgacttcaa actatactac aaggctacag 3300  
 taacaaaaac agcatggtag tggtagcaaa acagagatat agaycaatgg aacagaacag 3360  
 agccctcaga aataayrcr cayatctaca acyatctgat ctttgacaaa cctgasaaaa 3420  
 acaagmaatg gggaaaggat tccctattta ataaatgggt ctgggaaaac tggctagcca 3480  
 tatgtagaaa gctgaaactg gatcccttcc ttacacetta tacaataaatt aattcaagat 3540  
 ggattaaaga cttaaatgtt agacctaata ccataaaaaa cctagaagaa aacctaggca 3600  
 ataccattca ggacataggc atgggcaagg acttcatgwc taaaacacca aaagcaatgg 3660  
 caacaaaagc caaaattgac aaatgggatc taattaaact aaagagcttc tgcacagcaa 3720  
 aagaaactac catcagagt aacaggcaac ctacaraatg ggagaaaatt tttgcaayct 3780  
 actcatctga caaagggcta atatccagaa tctacaawga actcaaaaca atttacaaga 3840  
 aaaaancaa caaccccatc aaaaagtggg craaggatat gaacagacac ttctcaaaag 3900  
 aagacattta tgcagccaaa araccatga aaaaatgctc atcatcactg gccatcagag 3960  
 aaatgcaaat caaaaccaca atgagatacc atctcacacc agttagaatg gcratcata 4020  
 aaaagtcagg aaaaacagg tgctggagag gatgtggaga aataggaaac cttttacat 4080  
 gttgggtggg ctgtaaacta gttcaaccat tgtggaagtc agtgtggcga ttcctcaggg 4140  
 atctagaact agaaatacca tttgaccag ccattccatt actgggtata tacccaaagg 4200  
 aytataaatc atgctgctat aaagacacat gcacacgtat gtttatttgc gcaytattca 4260  
 caatagcaaa gacttggaa caacccaaat gtccaacaat gatagactgg attaagaaaa 4320

10050882-011802

tgtggcacat	atacaccatg	gaatactatg	cagccataaa	aaatgatgag	ttcatgtcct	4380
ttgtagggac	atggatgaar	ytggaaayca	tcattctcag	yaaactatcg	caagracaaa	4440
aaaccaaaca	ccgcatrttc	tcactcatag	gtgggaattg	aacaatgaga	wcacatggac	4500
acaggaagg	gaacatcaca	cwcyygggmc	tgttgtgggg	tggggggagg	ggggagggat	4560
agcattagga	gatataccta	atgytaaatg	aygagttaat	gggtgcagca	caccaacatg	4620
gcacatgtat	acatatgtaa	caaacctgca	crttgtgcac	atgtacccta	raacttaaag	4680
tataataaaa	aaaaaaagaa	aaaagaatc				4709

<210> 41  
 <211> 2248  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2234)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (2248)  
 <223> n equals a,t,g, or c

<400> 41

gggcagtgag	cgcaacgcaa	ttaatgtgag	ttagctcact	cattaggcac	cccaggcttt	60
acactttatg	cttccggctc	gtatgtttgtg	tgggaattgtg	agcggataac	aatttcacac	120
aggaacacgc	tatgaccatg	attacgcaa	gctcgaaatt	aaccctcact	aaaggaaca	180
aaagctggag	ctccaccgag	gtggcgcccg	ctctagaact	agtggatccc	ccgggctgca	240
ggaattcggc	acgagcggat	tctctttccg	cccgcctccat	ggcgggtggat	gcctgactgg	300
aagcccagat	gggatgcggc	tgacgcggaa	gcggctctgc	tcgtttctta	tcgccttgta	360
ctgcctattc	tcctctctacg	ctgcctacca	cgtctttctc	gggcgcgcgc	gccaggcgcc	420
ggcgggttcc	ccgcggggcc	tcagggaagg	ggcggccccc	gcgcgggaga	gacgcggccg	480
agaacagtcc	actttggaag	gtgaagaatg	gaatccttgg	gaaggagatg	aaaaaaatga	540
gcaacaacac	agatttaaaa	ctagccttca	aatatttagat	aaatccacga	aaggaaaaac	600
agatctcagt	gtacaaaatc	ggggcaaaag	tgccattgtc	caagctggca	gcgtttctgc	660
tcataaaaaca	ttctgaagaa	ccttgtgggc	cctctgtgta	tgtcacagga	ttcactccat	720
tagatgggaa	gctcctctgc	agatcttttc	tgagtaatcc	cmtctccatt	tctggcttct	780
gctgagatgg	ctgaggagac	ctgcttgtat	ctctgggagc	atatttttga	aggcttactt	840
gatcccagcg	atgtgactgc	tcaatggaga	gaaggaaagt	caatcgtagg	aagaacacag	900
tacagcttca	tcactgggtc	agctgttaata	ccagggtact	tctccgttga	tgtgaataat	960
gtggtactca	ttttaaatgg	aagagaaaaa	gcaaagatct	tttatgccac	ccagtgggta	1020
ctttatgcac	aaaattttagt	gcaaattcaa	aaactccagc	atcttgctgt	tgttttgctc	1080
ggaaatgaac	attgtgataa	tgagtggata	aaccatttcc	tcaaaagaaa	tggaggcttc	1140
gtggagctgc	ttttcataat	atatgacagc	cctctggatta	atgacgtgga	tggtttttcag	1200
ttgcttcaga	gtgatctcac	attgtgcccg	gtcggagtaa	acacagaatg	ctatcgaatc	1260
tatgaggctt	gctcctatgg	ctccatttcc	gtggtggaag	acgtgatgac	agctggcaac	1320
tgtgggaata	catctgtgca	ccacggtgct	cctctgcagt	tactcaagtc	catgggtgct	1380
ccctttatct	ttatcaagaa	ctggaaggaa	ctccctgctg	ttttagaaaa	agagaaaaact	1440
ataattttac	aagaaaaaat	tgaaaaga	aaaatgttac	ttcagtggta	tcagcacttc	1500
aagacagagc	ttaaaatgaa	atttactaat	attttagaaa	gctcattttt	aatgaataat	1560
aaaagttaat	tatctttttg	agctaacatg	tgatttttaa	aatcattttg	actactgggt	1620
gtataaatgt	gtttgtgtgt	gtatgtatct	atagatgttc	tttaaggtag	ccttgaaaaac	1680
tctacattat	gatatgccaca	taatgacatt	tcagtcagtg	gtagactaca	tatatgatag	1740
tggtcccata	agattataat	ggagctgaaa	aatctctatc	gcctagtgtg	gtcatagcct	1800
agtgatgaca	tatgtattgc	aatacatcac	tcacgtgttt	gtggtgatac	tggtgtaaac	1860
aaatctattg	cactgccagt	caagtaaaaag	tacagcaatt	atgtcctgta	cataatattt	1920
aataatgaca	ataaatgact	atgttactgg	taaaaaaaa	aaaaaaaaa	actcgagggg	1980
ggcccgctcc	aatnccctat	agtrgcgn				2040

<210> 42



<211> 1037  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (12)  
 <223> n equals a,t,g, or c

<400> 42

tcgacccacg	cntccggata	ggcacaggac	aggagtaggc	acctcgccta	ctgctgctta	60
accttttcagc	ttctccaggc	ccccaatcct	gcttgacacc	agcttgggaa	cgagacactg	120
ctgagctgga	agacttcgcg	ggccacaggc	acagccttcc	tgctgctggc	ggcgctgctg	180
gggctgcctg	gcaacggcct	cgtgggtgtg	agcttggcgg	gctggcggcc	tgcacggggg	240
cgaccgctgg	cgccacagct	tgtgctgcac	ctggcgctgg	ccgacggcgc	gggtgctgctg	300
ctcacgccgc	tctttgtggc	cttcctgacc	cggcaagcct	ggccgctggg	ccaggcgggc	360
tgcaaggcgg	tgtactacgt	gtgcgcgctc	agcatgtacg	ccagcgtgct	gctcaccggc	420
ctgctcagcc	tgcagcgtg	cctcgcggtc	acccgcccct	tctggcgcc	tccgtgcgca	480
gcccggccct	ggcccgcgc	ctgctgctgg	cggctctggc	ggccgcccctg	ttgctcgccg	540
tcccggcgcg	cgtctaccgc	cacctgtgga	gggaccgcgt	atgccagctg	tgccaccctg	600
cgccgggtcca	cgccgcgcgc	cacctgagcc	tggagactct	gaccgctttc	gtgcttccct	660
tccggctgat	gctcggctgc	tacagcgtga	cgtcggcacg	gctcgggggc	gcccgcgtggg	720
gctccggggc	gcaacggggc	cgggtggggc	ggctgggtgag	cgccatcgtg	ccttctctcg	780
cttgctctgg	gcccctacc	acgcagtcaa	ccttctgcag	gcggtcgcag	cgctggctcc	840
accggaagg	gccttggcga	agctgggcgg	agccggccag	gcggcgcgag	cggaactac	900
ggccttggcc	ttcttcagtt	ctagcgtcaa	cccggtgctc	tacgtcttca	ccgctggaga	960
tctgtgccc	cgggcaggtc	cccgtttcct	cacgcggctc	ttcgaaggct	ctggggaggc	1020
ccgagggggc	ggccgct					1037

<210> 43  
 <211> 2102  
 <212> DNA  
 <213> Homo sapiens

<400> 43

tccagacat	ctacaactgc	acggcctgga	acagcttcgg	ctccgacact	gagatcatcc	60
ggctcaagga	gcaaggttcg	gaaatgaagt	cgggagccgg	gctggaacag	agtctgtgcc	120
gatggcgta	tcattggggg	ggccgtagag	ctgggtgtgg	cttcctcgtc	cttatggcaa	180
ccatcgtggc	gttctgctgt	gcccgttccc	agagaaatct	caaagggtgt	gtgtcagcca	240
aaaatgat	ccgagtggaa	attgtccaca	aggaaccagc	ctctggctcg	gaggggtagg	300
agcactccac	catcaagcag	ctgatgatgg	accgggtgta	attccagcaa	gactcagtcc	360
tgaacagct	ggaggtcctc	aaagaagagg	agaaagagtt	tcagaacctg	aaggaccca	420
ccaatggcta	ctacagcgtc	aacaccttca	aagagcacca	ctcaaccccg	accatctccc	480
tctccagctg	ccagcccagc	ctgcgtcctg	cgggyaagca	gcgtgtgccc	acaggcatgt	540
ccttcaccaa	accctgagcg	accctgagcg	gccaggggcc	tctacgacta	cggcagcggt	600
ttgtggtgg	catgggcagc	tgcgtccatc	agytctgtga	gcgggagttc	cagagaggct	660
ccctcagcga	cagcagctcc	ttcctggaca	cgcagtgta	cagcagcgtc	agcagcagcg	720
gcaagcagga	tggctatgtg	cagttcgaca	aggccagcaa	ggcttctgct	tcctctctcc	780
accactocaa	gtcctcgctc	cagaactctg	acccagtcg	acccctgcag	cggcggatgc	840
agactcacgt	ctaaggatca	cacaccgcgg	gtggggacgg	gccagggaag	aggtcagggc	900
acgttctggt	tgtccaggga	cgaggggtac	tttgacagag	acaccagaat	tggccacttc	960
caggacagcc	tcccagcgcc	tctgccactg	ccttccttcg	aagctctgat	caagcacaaa	1020
tctgggtccc	caggtgctgt	gtgccaragg	tgggcgggtg	gggagacaga	cagaggctgc	1080
ggctgagtg	cgtgtgctta	gtcctggaca	cccgtgtccc	cggcccttcc	ctggaggccc	1140
ctctaccacc	tgtctgcccc	acaggcacaa	gtggcagcta	taactctgct	ttcatgaaac	1200
tgcgggtccac	tctctgggtc	ctctgtgggc	tctacccttc	retgaccasa	agctctacct	1260
acccctgtgc	ctgtgtctcc	atacagccct	ggggagaagg	ggatgacgtc	ttcccagcac	1320
tgaactgccc	cagaaacccc	ggtcctccac	tgtctctcat	agccataacc	ctggaggctg	1380
acaagccaga	aatggccttg	gctaaaggag	cctctctctc	accaggctgg	ccgggagccc	1440
acccccaatt	tgtttgggtg	tttgtgtcca	tactcttgca	gttctgtcct	tggacttgat	1500
gccgctgaac	tctgcgggtg	gaccgggtccc	gtcagagcct	gggtgtactg	ggggaggggag	1560
ggaggaggga	gctgtgctg	acggagcacc	tcgcccgggtg	tgccccctct	gggctgtgtg	1620
acccagcct	ccccaccac	ctcctgcttt	gtgtactcct	ccccctcccc	tcagcacaa	1680
cggagtccat	ataagaagtg	cgggagcttc	tctggtcagg	gttctctgaa	cacttatgga	1740
gagagtgcct	cctgggaagt	gtggcggttg	aaggggctg	agggcaggtc	tttaagatgg	1800

10050332.011002

cgagactgcc	cttctcagct	gataaacaca	agaacggcga	tectgtcttc	agtaaggctc	1860
cacgagaaga	gaggaagtat	atctacacct	caaccctcct	agtcaccacc	tgaaataaat	1920
gtaggggaca	ctactccaad	atgtttgttc	tggtcttttg	ttcctacaaa	gccacaggaa	1980
gaacccaaga	gctcatagaa	tgcgttgga	acccaaggtt	ctctgccctc	ctttgattca	2040
atcatcctag	acaataaagg	cagttgatag	ctctgaaaaa	aaaaaaaaaa	aaaaaaaaaa	2100
at						2102

<210> 44  
 <211> 1362  
 <212> DNA  
 <213> Homo sapiens

<400> 44						
tgcaccacg	cgccgggga	tctgggtca	ggcagcccg	ggggcttga	gagacttcca	60
gaggaggcg	ggactcggt	gcgcggcgg	caaggcagg	gccatgacc	tgattgaagg	120
ggtgggtgat	gaggtgacc	tccttttct	ggtgcttgc	tgcttcttg	tgctggccct	180
tgctgggtc	tcaacgcac	ccgctgagg	cggggaccca	ctgccccag	cgtcaggagc	240
cccaacgcca	tcacagccca	gcgcagcat	gcagctaacc	acagcatgag	aggggaggcc	300
ccaggggcag	agacccccag	cctgagacac	agaggtcaag	ctgcacagcc	agagccagc	360
acgggggttca	cagcaacacc	gccagcccc	gactccccgc	aggagccct	cgctgtacgg	420
ctgaaattcc	tcaatgatcc	agagcaggt	gccagggcct	ggccccacga	caccattggc	480
tccttgaaaa	ggacccagtt	tcccggccg	gaacagcagg	tgcgactcat	ctaccaagg	540
cagctgctag	gcgacgacac	ccagaccctg	ggcagccctc	acctccctcc	caactgcgtt	600
ctccactgcc	acgtgtccac	gagagtccgt	ccccaaaatc	ccccctgcc	gccgggggtc	660
gagcccgcc	cctccgggt	ggaaatcgg	agcctgctgc	tgccctgct	gctcctgctg	720
ttgctgctgc	tctgggtact	ccagatccag	taccggccct	tctttccct	gaccgccact	780
ctgggcctgg	ccggcttcac	cctgctcctc	agtctcctgg	cctttgccat	gtaccggccg	840
tagtgccctc	gcgggcgctt	ggcagcgtcg	ccggcccttc	cggaccttgc	tccccgcgc	900
gcggcgggag	ctgctgcctg	cccaggcccg	cctctccggc	ctgcctcttc	ccgctgcct	960
ggagcccgag	cctgcgcgc	agaggactcc	cgggactggc	ggaggccccg	ccctgcgacc	1020
gccggggctc	ggggccacac	cccggggctg	ctgacctca	gcccgcactg	ggagtgggct	1080
cctcgggggtc	gggcatctgc	tgctgctgcc	tcggcccggg	cagagccggg	ccgcccgggg	1140
gcccgtctta	gtgtttctgc	ggaggaccca	gcccctcca	atccctgaca	gctccttggg	1200
ctgagttggg	gacgccaggt	cggtgggagg	ctgggtgaagg	ggagcgggga	ggggcagagg	1260
agttccccgg	aaccctgca	gattaaagta	actgtgaagt	tttcaaaaaa	aaaaaaaaaa	1320
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaggcgcg	cc		1362

<210> 45  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 45						
ggcagcagcg	tcttgccctt	ctcccgat	tctgccccca	ctttctaaag	catgaaactc	60
tttatgtaag	ccccctgctc	accatcctgc	gtggagttcc	cgcctcaagg	ccctgcccct	120
gggcctgaca	ctcgggagcc	ttcccagct	accctcatcc	ttcccctgcc	cacaggccct	180
cacatcttat	ctgggtcatgg	aattatctgg	cattctcttg	caattttcag	ccacctcctt	240
ccccagctcc	caggccctctt	ggccctgaca	tctttttata	aaccaggaca	gtgttttagga	300
attaatgaga	acccagacct	cagacctgga	tcttgagcag	cagagcagtg	gatgcccagg	360
gctctcgcct	aaaaaaaaaa	aaaaaaaaaa				390

<210> 46  
 <211> 1546  
 <212> DNA  
 <213> Homo sapiens

<400> 46						
ggcagcagtt	cagccctgat	ggcagttacg	tgccggcagg	ctctgctgag	ggctctctgt	60
atatctggag	tgtgctcaca	gggaaagtgg	aaaaggttct	ttcaaagcag	cacagctcat	120
ccatcaatgc	ggtggcgctg	tcgccctctg	gctcgcacgt	tgctcagtg	gacaaaggat	180
gcaaagctgt	gctgtgggca	cagtactgac	ggggctctca	gggctgggag	gacccagtg	240
ccctcctcag	aagaagcaca	tggtctcctg	cagccctgtc	ctggcaggtg	atgtgctggg	300
tatagcatgg	acctcccgag	gaagctcaag	ctatgtggca	ctgtagcttt	gccgtgaatg	360

ggattttctga	agattttgact	gaggtctctc	ttggcctgga	agaataacac	tgaaaaaacc	420
tgacgctgcg	gtcacttagc	agaggctcag	gttcttgctt	tggaacacac	tactagctct	480
gaccttccat	acctcacttg	ggggagcaca	gggcccgcgt	gggcctcctc	accaacggca	540
gtgccaaaaat	cagcccccac	atcaagggtg	gtgtctctgt	gctttctctc	gtccttccaa	600
agtcggttct	ggcctaacgc	atgtcccaac	accttgggtt	catttgccc	gtgaactcac	660
tttaagcatt	ggattaaacg	aaactcccga	actacagacc	cctccctggt	gggttgcatg	720
aatgtgtctc	attactgctg	aaatgtcttc	acatctcttt	cactgttctt	cagagctttc	780
tggtctctct	tccccacaaa	aattcgacat	atttaaaaaat	ctccgtgtgg	ctttaaaaaa	840
tggttttttg	tttttttggt	tttttgaggt	gggagaggat	gtgtgaaaat	cttttccagg	900
gaaatggggt	cgctgcagag	gtaaggatgt	gttctgttat	cgatctgcag	acaccagaa	960
ggtgggtgca	cactgcatgc	ttgggggtgc	caagggatcc	gagacctcca	acatacttgt	1020
ctgaagggtg	tgattctggc	catggcccct	ctgccaaagc	tgtgtgcgat	gcccttgggtg	1080
cttttagtgca	agaagcctag	gtcagaagc	acagcagcgc	catctttccg	tttcaggggt	1140
tgtgatgaag	gccaaggaaa	aacattttatc	tttactattt	tacctacgta	taaagtttta	1200
gttcattggg	tgtgcgaaac	acccttttta	tcacttttaa	atttgactt	tatttttttt	1260
cttccatgct	tggtctctgg	acatttgggg	atgtgagtgt	tagagctggt	gagagaggag	1320
tcaggtggcc	ttcccaccca	tggtcctggc	ctccacctgc	cctctcttcc	ctgcctgatc	1380
accgctttcc	aatttgcctt	tcagagaact	taagtcaagg	agagttgaaa	ttcacaggcc	1440
agggcacatc	ttttatttat	ttcattatgt	tgcccaacag	aacttgattg	taaataataa	1500
taaagaaatc	tggtatatac	ttttcaaaaa	aaaaaaaaaa	aaaaaa		1546

<210> 47  
 <211> 1643  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (5)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (59)  
 <223> n equals a,t,g, or c

<400> 47						
aaganagaaa	ttaaccctca	ctaaaggga	caaaagctgg	agctccaccg	cggtggcgnc	60
cgctctagaa	ctagtggatc	ccccgggctg	caggaattcg	gcacgaggcc	ctgatggcag	120
ttacgtggcr	gcaggctctg	ctgagggtct	tctgtatata	tggaagtgtg	tcacagggaa	180
agtggaaaag	gttctttcaa	agcagcacag	ctcatccatc	aatgcggtgg	cgtgggtcgcc	240
ctctggctcg	cagttgtca	gtgtggacaa	aggatgcaaa	gctgtgctgt	gggcacagta	300
ctgacggggc	tctcagggtc	gggaggacct	cagtgccttc	ctcagaagaa	gcacatgggc	360
tcctgcagcc	ctgtcctggc	aggtgatgtg	ctgggtatag	catggacctc	ccagagaagc	420
tcaagctatg	tggtcactgt	gctttgccgt	gaatgggatt	tctgaagatt	tgactgaggt	480
ctctcttggc	ctggaagaat	aacactgaaa	aaacctgacg	ctgcggtcac	ttagcagagg	540
ctcaggttct	tgcttggga	aacactacta	gctctgacct	tccataacct	acttggggga	600
gcacagggcc	ccgctggctt	cctcaccaac	ggcagtgcca	aaatcagccc	ccacatcaag	660
gtggtgttct	ctgtgctttc	tctcgtcctt	ccaaagtccg	ttctggccta	acgcatgtcc	720
caacaccttg	ggttcatttg	cccggtgaac	tcactttaag	cattggatta	acggaaactc	780
ccgaactaca	gacccctccc	tggtgggttg	catgaatgtg	tctcattact	gctgaaatgt	840
cctcacatct	cttccactgt	tcttcagagc	tttctggctc	tctttcccca	caaaattcga	900
cacatttaaa	aatctccgtg	tggttttaaa	aaatggtttt	ttgttttttt	gtttttttga	960
ggtgggagag	gatgtgtgaa	aatcttttcc	agggaaatgg	gttcgctgca	gaggtaagga	1020
tgtgttcctg	tatogactct	cagacaccca	gaagggtggg	gcacactgca	tgcttggggg	1080
tgccaaggga	ttcgagacct	ccaacatact	tgtctgaagg	tggtgattct	ggccatggcc	1140
cctctgccaa	gcctgtgtgc	gatgccttg	gtgctttagt	gcaagaagcc	taggctcaga	1200
agcacagcag	cgccactttt	ccgtttcagg	ggttgtgatg	aaggccaagg	aaaaacattt	1260
atctttacta	ttttacctac	gtataaagtt	ttagttcatt	gggtgtgcga	aacacccttt	1320
ttatcacttt	taaatttgca	ctttattttt	tttcttccat	gcttgttctc	tggacatttg	1380
gggtgagtga	tggttagagct	ggtgagagag	gagtcaggcg	gccttcccac	cgatggctct	1440
ggcctccacc	tgccctctct	tcctgccttg	atcacccgtt	tccaatttgc	ccttcagaga	1500
acttaagtca	aggagagttg	aaattcacag	gccagggcac	atctttttatt	tattttcatta	1560
tggtggccaa	cagaacttga	ttgtaataaa	taataaagaa	atctgtttata	tactttttcaa	1620
aaaaaaaaaa	aaaaaaaaactc	gag				1643

<210> 48  
 <211> 652  
 <212> DNA  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (1)  
 <223> n equals a,t,g, or c

<400> 48  
 ncacctggtg gagggccgtg tgggaactwg tgggtccccc ggggtkgcmg ggaaaagaaa 60  
 tttgtatata gcccaactt aagactgtct caccagagct taaagggtgt agctctggcc 120  
 acagcagcgg cctcagtcac tcttcttaca tggattttga tgcaaattct gctccttttc 180  
 tattttctcaa gatttctagc cccttcgagg gscccaaccc tcgaaggagt ccagtaaattg 240  
 tgtaactcca ctctgccttg cctgtgctga aaacacatag aaagaggaac agaggaggca 300  
 ggcacctgga ggtcagaatg gcagctggat tgtgaagaag gtgtgggtttg catgcctggc 360  
 agtgatgagc ttcttaggct tcattcttaa cctcggagca agactcattg tccagccaca 420  
 agcagcgttg gcctccagag gcctccgtgg gcagggcctg ccctgtgaaa ctcaggtctk 480  
 caagagaacc ttgagaccag gtgccgtggg ytggtcgggt cacaaaggaa gacgggctyt 540  
 atccatttcc aggaagagcg cccttgtctc cctgggagta atgtatgtgg gaccaggcaa 600  
 gagggcagga gtggtgagga aacattccct tcttgtgaaa atgcaagcga gg 652

<210> 49  
 <211> 1093  
 <212> DNA  
 <213> Homo sapiens

<400> 49  
 ggcacgagcg gcgccgacga gaagaactgc ttctcctgcc agcccggcac cttccactgc 60  
 ggtaccaacc tgtgcatctt cgagacgtgg cgctgtgacg gccaggaaga ctgccaggac 120  
 ggcagcagat agcatgggtg cctggccgccc gtgccccgca aggtcatcac ggcggcgctc 180  
 attggcagcc tgggtgtgtgg cctgctgctg gtcacgcgcg tgggctgccc cttcaagctc 240  
 tactcactgc gcacgcagga atacagggcc ttcgagaccc agatgacgcg cctggaggct 300  
 gagttcgtgc ggcgggaggg acccccatcc tatggtcagc tcacgcacca gggcctcatt 360  
 ccacccgtgg aggactttcc tgtctacagt gcgtcccagg cctctgtgct gcagaatctt 420  
 cgcacagcca tgcggagaca gatgcgtcgg cacgcctccc gccggggggc ctcccgcgcg 480  
 cgcctcggcc gcctctggaa ccggctcttt caccggccgc gggcgccccg aggccagatc 540  
 ccactgctga ccgcagcagc cccctcacag accgtgctgg gcgatggctt cctccagcct 600  
 gctccagggg ctgccccoga cccccagca ccgctcatgg acacaggcag caccaggcg 660  
 gccggagaca ggcccccagc tgccccggcg cgtgcacccg aggtgggacc ttcaggggcca 720  
 cccttgccct cgggcctgcg agaccagag tgcaggcccg tggacaagga cagaaaggct 780  
 tgcaggagc cactggcaga cggccagct cctgcagatg cacctcggga gccctgctca 840  
 gcccaggacc cgcaccccca ggtctccact gccagcagca ccctgggccc cactcgcga 900  
 gagccactgg ggggtctgcag gaaccccccg ccccccctgt ccccaatgct ggaggccagc 960  
 gatgatgagg ccctgttggg ctggtgaccg ctgggctcgc tgggtgaccg cacagccccg 1020  
 ctttgtaacc aggggaatata cagtcatttc taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080  
 aaaaaaaaaa aaa 1093

<210> 50  
 <211> 2752  
 <212> DNA  
 <213> Homo sapiens

<400> 50  
 ggcacgagga cgtcgtcgcc tcagcgccgg ctcggggccc ggccggcgcc gccgaccgtt 60  
 gagccgcccg ctgagccgcc tgcgtgaagtc cctccctcag gaacccctcc gccacccctc 120  
 acctccgaac cgctctcgcg gcggcgaccc atgtgggggt tcaggctcct gcggctcgcc 180  
 ccgttgctgc tccgtgctgc gcagctcgga atcggaacg cctcgtcctg ctctcaggcc 240  
 agaaccatga acccgggggc cagcgggcgc gcgcatgct cctctcggc cgagggtgcg 300  
 cgcgctcagt gcctgcagct ttccaccgtg cctggagccg agccgcagcg cagcaacgaa 360  
 ttgctcctgt tggcgggcggc cggggaggga ctggagcggc aggcctccc cggggaccca 420

10050882-011802

gcgaaggagg agcgcgagcc gccgccccag catcacgtcc tctatttccc tggggatgtg 480  
 cagaattacc atgaaattat gactcgtcat cctgagaatt atcaatggga aaactggagt 540  
 ctagaaaatg ttgctaccat tttagcccac cgggtcccca atagttatat ttgggtgata 600  
 aaatgttccc gaatgcattt gcacaaaattc agctgctatg acaattttgt gaaaagtaac 660  
 acgtttgggtg ccccgagaaca caatactgac tttggagctt ttaagcacct ttatatgtta 720  
 ttagttaatg cttttaattt aagtcagaat agtttatcaa agaaaagtgt gaatgtttgg 780  
 aataaggact ccatagcatc taactgtaga tccagtcctt ctcatactac gaatggttgc 840  
 cagggagaaa aagtgaggac ctgtgaaaaa tctgatgagt ctgccatgag tttttatcca 900  
 ccatcactaa atgacgcatac ttttactttg attggattca gtaaaagggtg tggtgttttg 960  
 aatcagttgc tttttgaatt gaaagaagcc aagaaagaca agaacataga tgcttttatc 1020  
 aaaagcataa gaacaatgta ttggctggat ggtgggtcatt ctggaggag caatacttgg 1080  
 gttacttatc cagaagtctt gaaagaattt gcacaaacag gaattatcgt tcacactcat 1140  
 gtaacacctt accaagtacg tgatccaatg agatccttga ttggaaagga gcacaagaaa 1200  
 tttgttcaga tacttgggga tcttgggtat caggtgacta gccaaattca ttttacaag 1260  
 gaagctcctt ccatagagaa tcacttcagg gttcatgaag tattttgaga ttacaggtat 1320  
 attaatgaac ttgttcagtg gaagaacata agcacttttg agtgttataa attcagataa 1380  
 tgggatgtaa ttcatagctg cattgtcagt tttgggggtat ggggggaagc acacattcct 1440  
 aaaatgtgag tgtaattgtc aatagtattt tttgcttgtg aatgtgagca gttattaatt 1500  
 tggattgagt tagaattagt taatttgaag tctacaaggt ggtttgtaat aatgctgagg 1560  
 agatataaga cccttaaaat gaaagttaaca acattgttct tataaaagggt aactaaaatt 1620  
 gttactgttg gaaataactg attttctgag taatgtttta aactaatttg gtgacatttt 1680  
 aacagtaatt agctattttg agtggaataa ttttcatttc tcttcaaaca aaagcaaagg 1740  
 tacgatgctg ttttctatca ttttgggaata actgcacct gccttttgtg tttttgtaaa 1800  
 ctccctgact cattctttca tgtgtcacca agtacttttc tcatgagagt caacatatat 1860  
 ttgtttccaa atgtccacaa gtgtacaata gtgtaaagggt ggtttttaaa aacatagcca 1920  
 ggtgtggtgg cacgtgcctt tagttccagc tactcaggag gctaaggcag gaggattgct 1980  
 tgagcccagg ctgtgtggtt caccataaatt gtgtttgtga ctagtacttt gcactccaac 2040  
 ctgggcaaca tagtgggact tcatctctaa aacaaaacaa accaaaatta cacttaagca 2100  
 ctattgttta atttttaatt gtacgtttat cattattttg ggtaagacat tctgggggtt 2160  
 cttgaatctt gtccaaaaac cagtgtttt ggaaaattgc tttaaattga gcatatttat 2220  
 gtatattgga taaaaatgta ctacagagca aatttcaaat ttttcattat atcagtcttt 2280  
 ttgaaaggat caacttggat aaaataaata tataatgctc tatttgtag agctctatta 2340  
 aaaaggaaac agattccata gatctaagtc aatgtttctc cagaagcatg attttgtctg 2400  
 ccaaaagaaa atagctctct ttggccaaaa tgcaaaatta cattgctata agaaaagtta 2460  
 caagggaag tttgaagaca caaatgattt aattttggct caaaaactga atttgcttaa 2520  
 cactgtcata taatttgggt gaagtttcct tctgcccggt tttcttgacc tagataaata 2580  
 cactttgaga aatccagatc taataaatgt caaccaacat tgacattgta attgggtgat 2640  
 tacaataaaa ggtgagcagt ttgttgttta ttaataatta gcttttgcag gtaatgaaat 2700  
 agcaggggaag taacatgctg ctttaggact aaaaaaaaaa aaaaaaaaaa aa 2752

<210> 51  
 <211> 761  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (376)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (380)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (381)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (384)  
 <223> Xaa equals any of the naturally occurring L-amino acids

100505002-011002

<220>  
 <221> SITE  
 <222> (463)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (483)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (486)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (490)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 51  
 Met Ala Leu Pro Ala Leu Gly Leu Asp Pro Trp Ser Leu Leu Gly Leu  
   1                  5                  10                  15  
 Phe Leu Phe Gln Leu Leu Gln Leu Leu Leu Pro Thr Thr Thr Ala Gly  
                   20                  25                  30  
 Gly Gly Gly Gln Gly Pro Met Pro Arg Val Arg Tyr Tyr Ala Gly Asp  
                   35                  40                  45  
 Glu Arg Arg Ala Leu Ser Phe Phe His Gln Lys Gly Leu Gln Asp Phe  
   50                  55                  60  
 Asp Thr Leu Leu Leu Ser Gly Asp Gly Asn Thr Leu Tyr Val Gly Ala  
   65                  70                  75                  80  
 Arg Glu Ala Ile Leu Ala Leu Asp Ile Gln Asp Pro Gly Val Pro Arg  
                   85                  90                  95  
 Leu Lys Asn Met Ile Pro Trp Pro Ala Ser Asp Arg Lys Lys Ser Glu  
                   100                  105                  110  
 Cys Ala Phe Lys Lys Lys Ser Asn Glu Thr Gln Cys Phe Asn Phe Ile  
                   115                  120                  125  
 Arg Val Leu Val Ser Tyr Asn Val Thr His Leu Tyr Thr Cys Gly Thr  
   130                  135                  140  
 Phe Ala Phe Ser Pro Ala Cys Thr Phe Ile Glu Leu Gln Asp Ser Tyr  
   145                  150                  155                  160  
 Leu Leu Pro Ile Ser Glu Asp Lys Val Met Glu Gly Lys Gly Gln Ser  
                   165                  170                  175  
 Pro Phe Asp Pro Ala His Lys His Thr Ala Val Leu Val Asp Gly Met  
                   180                  185                  190  
 Leu Tyr Ser Gly Thr Met Asn Asn Phe Leu Gly Ser Glu Pro Ile Leu  
                   195                  200                  205  
 Met Arg Thr Leu Gly Ser Gln Pro Val Leu Lys Thr Asp Asn Phe Leu  
   210                  215                  220  
 Arg Trp Leu His His Asp Ala Ser Phe Val Ala Ala Ile Pro Ser Thr  
   225                  230                  235                  240

10050882-011802

Gln Val Val Tyr Phe Phe Phe Glu Glu Thr Ala Ser Glu Phe Asp Phe  
 245 250 255  
 Phe Glu Arg Leu His Thr Ser Arg Val Ala Arg Val Cys Lys Asn Asp  
 260 265 270  
 Val Gly Gly Glu Lys Leu Leu Gln Lys Lys Trp Thr Thr Phe Leu Lys  
 275 280 285  
 Ala Gln Leu Leu Cys Thr Gln Pro Gly Gln Leu Pro Phe Asn Val Ile  
 290 295 300  
 Arg His Ala Val Leu Leu Pro Ala Asp Ser Pro Thr Ala Pro His Ile  
 305 310 315 320  
 Tyr Ala Val Phe Thr Ser Gln Trp Gln Val Gly Gly Thr Arg Ser Ser  
 325 330 335  
 Ala Val Cys Ala Phe Ser Leu Leu Asp Ile Glu Arg Val Phe Lys Gly  
 340 345 350  
 Lys Tyr Lys Glu Leu Asn Lys Glu Thr Ser Arg Trp Thr Thr Tyr Arg  
 355 360 365  
 Gly Pro Glu Thr Asn Pro Arg Xaa Gly Ser Cys Xaa Xaa Gly Pro Xaa  
 370 375 380  
 Ser Asp Lys Ala Leu Thr Phe Met Lys Asp His Phe Leu Met Asp Glu  
 385 390 395 400  
 Gln Val Val Gly Thr Pro Leu Leu Val Lys Ser Gly Val Glu Tyr Thr  
 405 410 415  
 Arg Leu Ala Val Glu Thr Ala Gln Gly Leu Asp Gly His Ser His Leu  
 420 425 430  
 Val Met Tyr Leu Gly Thr Thr Thr Gly Ser Leu His Lys Ala Val Val  
 435 440 445  
 Ser Gly Asp Ser Ser Ala His Leu Val Glu Glu Ile Gln Leu Xaa Pro  
 450 455 460  
 Asp Pro Glu Pro Val Arg Asn Leu Gln Leu Ala Pro Thr Gln Gly Ala  
 465 470 475 480  
 Val Phe Xaa Gly Phe Xaa Gly Gly Val Xaa Arg Val Pro Arg Ala Asn  
 485 490 495  
 Cys Ser Val Tyr Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro  
 500 505 510  
 His Cys Ala Trp Asp Pro Glu Ser Arg Thr Cys Cys Leu Leu Ser Ala  
 515 520 525  
 Pro Asn Leu Asn Ser Trp Lys Gln Asp Met Glu Arg Gly Asn Pro Glu  
 530 535 540  
 Trp Ala Cys Ala Ser Gly Pro Met Ser Arg Ser Leu Arg Pro Gln Ser  
 545 550 555 560  
 Arg Pro Gln Ile Ile Lys Glu Val Leu Ala Val Pro Asn Ser Ile Leu  
 565 570 575  
 Glu Leu Pro Cys Pro His Leu Ser Ala Leu Ala Ser Tyr Tyr Trp Ser  
 580 585 590

10050883-011302  
 203110-28805001

His Gly Pro Ala Ala Val Pro Glu Ala Ser Ser Thr Val Tyr Asn Gly  
 595 600 605  
 Ser Leu Leu Leu Ile Val Gln Asp Gly Val Gly Gly Leu Tyr Gln Cys  
 610 615 620  
 Trp Ala Thr Glu Asn Gly Phe Ser Tyr Pro Val Ile Ser Tyr Trp Val  
 625 630 635 640  
 Asp Ser Gln Asp Gln Thr Leu Ala Leu Asp Pro Glu Leu Ala Gly Ile  
 645 650 655  
 Pro Arg Glu His Val Lys Val Pro Leu Thr Arg Val Ser Gly Gly Ala  
 660 665 670  
 Ala Leu Ala Ala Gln Gln Ser Tyr Trp Pro His Phe Val Thr Val Thr  
 675 680 685  
 Val Leu Phe Ala Leu Val Leu Ser Gly Ala Leu Ile Ile Leu Val Ala  
 690 695 700  
 Ser Pro Leu Arg Ala Leu Arg Ala Arg Gly Lys Val Gln Gly Cys Glu  
 705 710 715 720  
 Thr Leu Arg Pro Gly Glu Lys Ala Pro Leu Ser Arg Glu Gln His Leu  
 725 730 735  
 Gln Ser Pro Lys Glu Cys Arg Thr Ser Ala Ser Asp Val Asp Ala Asp  
 740 745 750  
 Asn Asn Cys Leu Gly Thr Glu Val Ala  
 755 760

<210> 52  
 <211> 305  
 <212> PRT  
 <213> Homo sapiens

<400> 52  
 Met Gly Arg Pro Arg Pro Arg Ala Ala Lys Thr Trp Met Phe Leu Leu  
 1 5 10 15  
 Leu Leu Gly Gly Ala Trp Ala Ala Cys Gly Ser Leu Asp Leu Leu Thr  
 20 25 30  
 Lys Leu Tyr Ala Glu Asn Leu Pro Cys Val His Leu Asn Pro Gln Trp  
 35 40 45  
 Pro Ser Gln Pro Ser His Cys Pro Arg Gly Trp Arg Ser Asn Pro Leu  
 50 55 60  
 Pro Pro Ala Ala Gly His Ser Arg Ala Gln Glu Asp Lys Val Leu Gly  
 65 70 75 80  
 Gly His Glu Cys Gln Pro His Ser Gln Pro Trp Gln Ala Ala Leu Phe  
 85 90 95  
 Gln Gly Gln Gln Leu Leu Cys Gly Gly Val Leu Val Gly Gly Asn Trp  
 100 105 110  
 Val Leu Thr Ala Ala His Cys Lys Lys Pro Lys Tyr Thr Val Arg Leu  
 115 120 125  
 Gly Asp His Ser Leu Gln Asn Lys Asp Gly Pro Glu Gln Glu Ile Pro  
 130 135 140

202110 23305001



Val	Val	Gln	Ser	Ile	Pro	His	Pro	Cys	Tyr	Asn	Ser	Ser	Asp	Val	Glu
145					150					155					160
Asp	His	Asn	His	Asp	Leu	Met	Leu	Leu	Gln	Leu	Arg	Asp	Gln	Ala	Ser
				165					170					175	
Leu	Gly	Ser	Lys	Val	Lys	Pro	Ile	Ser	Leu	Ala	Asp	His	Cys	Thr	Gln
			180					185					190		
Pro	Gly	Gln	Lys	Cys	Thr	Val	Ser	Gly	Trp	Gly	Thr	Val	Thr	Ser	Pro
		195					200					205			
Arg	Glu	Asn	Phe	Pro	Asp	Thr	Leu	Asn	Cys	Ala	Glu	Val	Lys	Ile	Phe
	210					215					220				
Pro	Gln	Lys	Lys	Cys	Glu	Asp	Ala	Tyr	Pro	Gly	Gln	Ile	Thr	Asp	Gly
225					230					235					240
Met	Val	Cys	Ala	Gly	Ser	Ser	Lys	Gly	Ala	Asp	Thr	Cys	Gln	Gly	Asp
				245					250					255	
Ser	Gly	Gly	Pro	Leu	Val	Cys	Asp	Gly	Ala	Leu	Gln	Gly	Ile	Thr	Ser
			260					265					270		
Trp	Gly	Ser	Asp	Pro	Cys	Gly	Arg	Ser	Asp	Lys	Pro	Gly	Val	Tyr	Thr
		275					280					285			
Asn	Ile	Cys	Arg	Tyr	Leu	Asp	Trp	Ile	Lys	Lys	Ile	Ile	Gly	Ser	Lys
	290					295					300				
Gly															
305															
<210>	53														
<211>	379														
<212>	PRT														
<213>	Homo sapiens														
<400>	53														
Met	Asn	Leu	Cys	Val	Ile	Leu	Leu	Ile	Leu	Val	Phe	Met	Val	Pro	Phe
1				5					10					15	
Tyr	Ile	Gly	Tyr	Phe	Ile	Val	Ser	Asn	Ile	Arg	Leu	Leu	His	Lys	Gln
			20					25					30		
Arg	Leu	Leu	Phe	Ser	Cys	Leu	Leu	Trp	Leu	Thr	Phe	Met	Tyr	Phe	Phe
		35					40					45			
Trp	Lys	Leu	Gly	Asp	Pro	Phe	Pro	Ile	Leu	Ser	Pro	Lys	His	Gly	Ile
	50					55					60				
Leu	Ser	Ile	Glu	Gln	Leu	Ile	Ser	Arg	Val	Gly	Val	Ile	Gly	Val	Thr
65					70					75					80
Leu	Met	Ala	Leu	Leu	Ser	Gly	Phe	Gly	Ala	Val	Asn	Cys	Pro	Tyr	Thr
				85					90					95	
Tyr	Met	Ser	Tyr	Phe	Leu	Arg	Asn	Val	Thr	Asp	Thr	Asp	Ile	Leu	Ala
			100					105					110		
Leu	Glu	Arg	Arg	Leu	Leu	Gln	Thr	Met	Asp	Met	Ile	Ile	Ser	Lys	Lys
		115					120					125			
Lys	Arg	Met	Ala	Met	Ala	Arg	Arg	Thr	Met	Phe	G				

130 135 140

His Asn Lys Pro Ser Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr  
145 150 155 160

Ser Ala Ser Gly Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp  
165 170 175

Ala Leu Glu Glu Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu  
180 185 190

Tyr Ala Thr Lys Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys  
195 200 205

Tyr Phe Asn Phe Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys  
210 215 220

Ile Phe Met Ala Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys Thr  
225 230 235 240

Asp Pro Val Thr Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu Gly Ile  
245 250 255

Gln Phe Asp Val Lys Phe Trp Ser Gln His Ile Ser Phe Ile Leu Val  
260 265 270

Gly Ile Ile Ile Val Thr Ser Ile Arg Gly Leu Leu Ile Thr Leu Thr  
275 280 285

Lys Phe Phe Tyr Ala Ile Ser Ser Ser Lys Ser Ser Asn Val Ile Val  
290 295 300

Leu Leu Leu Ala Gln Ile Met Gly Met Tyr Phe Val Ser Ser Val Leu  
305 310 315 320

Leu Ile Arg Met Ser Met Pro Leu Glu Tyr Arg Thr Ile Ile Thr Glu  
325 330 335

Val Leu Gly Glu Leu Gln Phe Asn Phe Tyr His Arg Trp Phe Asp Val  
340 345 350

Ile Phe Leu Val Ser Ala Leu Ser Ser Ile Leu Phe Leu Tyr Leu Ala  
355 360 365

His Lys Gln Ala Pro Glu Lys Gln Met Ala Pro  
370 375

<210> 54

<211> 228

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (207)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (217)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (218)

20050500T-01400

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 54

Met Asn Ile Leu Cys Thr Cys Leu Leu Cys Val Leu Gln His Gln Ser  
1 5 10 15

Ala Ser Ala Ser Tyr Ala Leu Gly Asn Thr Pro Arg His Arg Gln Ser  
20 25 30

Leu Pro Arg Pro Ser Gly Gln Thr Ser Val Thr Thr Ser Cys Cys Asn  
35 40 45

Leu Leu Thr Glu Leu Arg His Pro Ser Ser Ala Asp Phe Gly His Gln  
50 55 60

Ser Ser Arg Phe Ser Leu Leu Glu Leu Arg His Pro Ser Ala Ala Ala  
65 70 75 80

Cys Gly His Gln Asn Ser Arg Phe Ser Leu Leu Glu Leu Arg Arg Pro  
85 90 95

Ser Ser Asp Ala Phe Gly His Gln Ser Ser Arg Leu Ser Leu Leu Asp  
100 105 110

Leu Arg His Thr Ser Ala Ala Ala Phe Gly His Gln Asn Ser Arg Phe  
115 120 125

Ser Leu Val Glu Leu Arg His Pro Ser Ser Asp Ala Phe Gly His Gln  
130 135 140

Asn Ser Arg Phe Cys Phe Leu Asp Leu Arg His Pro Ser Ala Ala Ala  
145 150 155 160

Phe Gly His Gln Asn Ser Arg Phe Ser His Val Glu Pro Arg His Pro  
165 170 175

Ser Ser Ala Ala Phe Gly His Gln Asn Ser Arg Phe Ser Gly Leu Cys  
180 185 190

Thr Leu Gly Cys Val Ala Ala Thr Pro Ala Pro Gly Phe Gln Xaa Phe  
195 200 205

Gly Leu Arg Leu Gln Ala Thr Pro Xaa Xaa Ser Leu Val Leu Arg Leu  
210 215 220

Leu Asp Leu Asp  
225

<210> 55

<211> 552

<212> PRT

<213> Homo sapiens

<400> 55

Met Leu Lys Ala Ser Cys Leu Pro Leu Gly Phe Ile Val Phe Leu Pro  
1 5 10 15

Ala Val Leu Leu Leu Val Ala Pro Pro Leu Pro Ala Ala Asp Ala Ala  
20 25 30

His Glu Phe Thr Val Tyr Arg Met Gln Gln Tyr Asp Leu Gln Gly Gln  
35 40 45

Pro Tyr Gly Thr Arg Asn Ala Val Leu Asn Thr Glu Ala Arg Thr Met  
50 55 60

200101-23305001

Ala 65	Ala	Glu	Val	Leu	Ser 70	Arg	Arg	Cys	Val	Leu 75	Met	Arg	Leu	Leu	Asp 80
Phe	Ser	Tyr	Glu	Gln 85	Tyr	Gln	Lys	Ala	Leu 90	Arg	Gln	Ser	Ala	Gly 95	Ala
Val	Val	Ile	Ile 100	Leu	Pro	Arg	Ala	Met 105	Ala	Ala	Val	Pro	Gln	Asp	Val
Val	Arg	Gln 115	Phe	Met	Glu	Ile	Glu 120	Pro	Glu	Met	Leu 125	Ala	Met	Glu	Thr
Ala	Val 130	Pro	Val	Tyr	Phe	Ala 135	Val	Glu	Asp	Glu	Ala 140	Leu	Leu	Ser	Ile
Tyr 145	Lys	Gln	Thr	Gln 150	Ala	Ala	Ser	Ala	Ser	Gln 155	Gly	Ser	Ala	Ser	Ala 160
Ala	Glu	Val	Leu	Leu 165	Arg	Thr	Ala	Thr	Ala 170	Asn	Gly	Phe	Gln	Met 175	Val
Thr	Ser	Gly	Val 180	Gln	Ser	Lys	Ala	Val 185	Ser	Asp	Trp	Leu	Ile 190	Ala	Ser
Val	Glu	Gly 195	Arg	Leu	Thr	Gly	Leu 200	Gly	Gly	Glu	Asp 205	Leu	Pro	Thr	Ile
Val	Ile 210	Val	Ala	His	Tyr	Asp 215	Ala	Phe	Gly	Val	Ala 220	Pro	Trp	Leu	Ser
Leu 225	Gly	Ala	Asp	Ser	Asn 230	Gly	Ser	Gly	Val	Ser 235	Val	Leu	Leu	Glu	Leu 240
Ala	Arg	Leu	Phe	Ser 245	Arg	Leu	Tyr	Thr	Tyr 250	Lys	Arg	Thr	His	Ala 255	Ala
Tyr	Asn	Leu	Leu 260	Phe	Phe	Ala	Ser	Gly 265	Gly	Gly	Lys	Phe	Asn 270	Tyr	Gln
Gly	Thr	Lys 275	Arg	Trp	Leu	Glu	Asp 280	Asn	Leu	Asp	His 285	Thr	Asp	Ser	Ser
Leu	Leu 290	Gln	Asp	Asn	Val	Ala 295	Phe	Val	Leu	Cys	Leu 300	Asp	Thr	Val	Gly
Arg 305	Gly	Ser	Ser	Leu	His 310	Leu	His	Val	Ser	Lys 315	Pro	Pro	Arg	Glu	Gly 320
Thr	Leu	Gln	His 325	Ala	Phe	Leu	Arg	Glu	Leu 330	Glu	Thr	Val	Ala	Ala 335	His
Gln	Phe	Pro	Glu 340	Val	Arg	Phe	Ser	Met 345	Val	His	Lys	Arg	Ile 350	Asn	Leu
Ala	Glu	Asp 355	Val	Leu	Ala	Trp	Glu 360	His	Glu	Arg	Phe	Ala 365	Ile	Arg	Arg
Leu	Pro 370	Ala	Phe	Thr	Leu	Ser 375	His	Leu	Glu	Ser	His 380	Arg	Asp	Gly	Gln
Arg 385	Ser	Ser	Ile	Met	Asp 390	Val	Arg	Ser	Arg	Val 395	Asp	Ser	Lys	Thr	Leu 400
Thr	Arg	Asn	Thr	Arg 405	Ile	Ile	Ala	Glu	Ala 410	Leu	Thr	Arg	Val	Ile 415	Tyr

Asn Leu Thr Glu Lys Gly Thr Pro Pro Asp Met Pro Val Phe Thr Glu  
 420 425 430  
 Gln Met Gln Ile Gln Gln Glu Gln Leu Asp Ser Val Met Asp Trp Leu  
 435 440 445  
 Thr Asn Gln Pro Arg Ala Ala Gln Leu Val Asp Lys Asp Ser Thr Phe  
 450 455 460  
 Leu Ser Thr Leu Glu His His Leu Ser Arg Tyr Leu Lys Asp Val Lys  
 465 470 475 480  
 Gln His His Val Lys Ala Asp Lys Arg Asp Pro Glu Phe Val Phe Tyr  
 485 490 495  
 Asp Gln Leu Lys Gln Val Met Asn Ala Tyr Arg Val Lys Pro Ala Val  
 500 505 510  
 Phe Asp Leu Leu Leu Ala Val Gly Ile Ala Ala Tyr Leu Gly Met Ala  
 515 520 525  
 Tyr Val Ala Val Gln His Phe Ser Leu Leu Tyr Lys Thr Val Gln Arg  
 530 535 540  
 Leu Leu Val Lys Ala Lys Thr Gln  
 545 550

<210> 56  
 <211> 385  
 <212> PRT  
 <213> Homo sapiens

<400> 56  
 Met Ser Phe Ile Met Lys Leu His Arg His Phe Gln Arg Thr Val Ile  
 1 5 10 15  
 Leu Leu Ala Thr Phe Cys Met Val Ser Ile Ile Ile Ser Ala Tyr Tyr  
 20 25 30  
 Leu Tyr Ser Gly Tyr Lys Gln Glu Asn Glu Leu Ser Glu Thr Ala Ser  
 35 40 45  
 Glu Val Asp Cys Gly Asp Leu Gln His Leu Pro Tyr Gln Leu Met Glu  
 50 55 60  
 Val Lys Ala Met Lys Leu Phe Asp Ala Ser Arg Thr Asp Pro Thr Val  
 65 70 75 80  
 Leu Val Phe Val Glu Ser Gln Tyr Ser Ser Leu Gly Gln Asp Ile Ile  
 85 90 95  
 Met Ile Leu Glu Ser Ser Arg Phe Gln Tyr His Ile Glu Ile Ala Pro  
 100 105 110  
 Gly Lys Gly Asp Leu Pro Val Leu Ile Asp Lys Met Lys Gly Lys Tyr  
 115 120 125  
 Ile Leu Ile Ile Tyr Glu Asn Ile Leu Lys Tyr Ile Asn Met Asp Ser  
 130 135 140  
 Trp Asn Arg Ser Leu Leu Asp Lys Tyr Cys Val Glu Tyr Gly Val Gly  
 145 150 155 160  
 Val Ile Gly Phe His Lys Thr Ser Glu Lys Ser Val Gln Ser Phe Gln

20250322 01:15:02

```

<210> 57
<211> 190
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 57
Met Leu Val Leu Ala Thr Leu Ala Ala Leu Phe Ile Leu Thr Thr Ala
  1             5             10             15
Val Leu Ala Glu Arg Leu Phe Arg Arg Ala Leu Arg Pro Asp Pro Ser
          20             25             30

```

His Arg Ala Pro Thr Leu Val Trp Arg Pro Gly Gly Glu Leu Trp Ile  
           35                          40                          45  
 Glu Pro Met Gly Thr Ala Arg Lys Arg Ser Glu Asp Trp Tyr Gly Ser  
           50                          55                          60  
 Ala Val Pro Leu Leu Thr Asp Arg Ala Pro Glu Pro Pro Thr Gln Val  
           65                          70                          75                          80  
 Gly Thr Leu Glu Ala Arg Ala Thr Ala Pro Pro Ala Pro Ser Ala Pro  
                           85                          90                          95  
 Asn Ser Ala Pro Ser Asn Leu Gly Pro Gln Thr Val Leu Glu Val Pro  
                           100                          105                          110  
 Ala Arg Ser Thr Phe Trp Gly Pro Gln Pro Trp Glu Gly Arg Pro Pro  
           115                          120                          125  
 Ala Thr Gly Leu Val Ser Trp Ala Glu Pro Glu Gln Arg Pro Glu Ala  
           130                          135                          140  
 Ser Val Gln Phe Gly Ser Pro Gln Ala Arg Xaa Gln Arg Pro Gly Ser  
           145                          150                          155                          160  
 Pro Asp Pro Glu Trp Gly Leu Gln Pro Arg Val Thr Leu Glu Gln Ile  
                           165                          170                          175  
 Ser Ala Phe Xaa Lys Arg Glu Gly Arg Thr Ser Val Gly Phe  
                           180                          185                          190

<210> 58  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 58  
 Met Ala Val Ser Val Ile Phe Cys Gln Lys Leu Lys Thr Gly Ser Val  
   1                          5                          10                          15  
 Lys Leu Trp Ile Gln Met Leu Leu Trp Leu Gln Phe Ser Val Ala Cys  
           20                          25                          30  
 Leu Arg Leu Arg Lys Gly Gly Lys Trp Ser Pro Trp Gly Leu Met Leu  
           35                          40                          45  
 Lys Glu Val Ile Trp Lys Asp Cys Arg  
           50                          55

<210> 59  
 <211> 443  
 <212> PRT  
 <213> Homo sapiens

<400> 59  
 Met Arg Leu Thr Arg Lys Arg Leu Cys Ser Phe Leu Ile Ala Leu Tyr  
   1                          5                          10                          15  
 Cys Leu Phe Ser Leu Tyr Ala Ala Tyr His Val Phe Phe Gly Arg Arg  
           20                          25                          30  
 Arg Gln Ala Pro Ala Gly Ser Pro Arg Gly Leu Arg Lys Gly Ala Ala  
           35                          40                          45

100508882-011302

Pro Ala Arg Glu Arg Arg Gly Arg Glu Gln Ser Thr Leu Glu Ser Glu  
 50 55 60  
 Glu Trp Asn Pro Trp Glu Gly Asp Glu Lys Asn Glu Gln Gln His Arg  
 65 70 75 80  
 Phe Lys Thr Ser Leu Gln Ile Leu Asp Lys Ser Thr Lys Gly Lys Thr  
 85 90 95  
 Asp Leu Ser Val Gln Ile Trp Gly Lys Ala Ala Ile Gly Leu Tyr Leu  
 100 105 110  
 Trp Glu His Ile Phe Glu Gly Leu Leu Asp Pro Ser Asp Val Thr Ala  
 115 120 125  
 Gln Trp Arg Glu Gly Lys Ser Ile Val Gly Arg Thr Gln Tyr Ser Phe  
 130 135 140  
 Ile Thr Gly Pro Ala Val Ile Pro Gly Tyr Phe Ser Val Asp Val Asn  
 145 150 155 160  
 Asn Val Val Leu Ile Leu Asn Gly Arg Glu Lys Ala Lys Ile Phe Tyr  
 165 170 175  
 Ala Thr Gln Trp Leu Leu Tyr Ala Gln Asn Leu Val Gln Ile Gln Lys  
 180 185 190  
 Leu Gln His Leu Ala Val Val Leu Leu Gly Asn Glu His Cys Asp Asn  
 195 200 205  
 Glu Trp Ile Asn Pro Phe Leu Lys Arg Asn Gly Gly Phe Val Glu Leu  
 210 215 220  
 Leu Phe Ile Ile Tyr Asp Ser Pro Trp Ile Asn Asp Val Asp Val Phe  
 225 230 235 240  
 Gln Trp Pro Leu Gly Val Ala Thr Tyr Arg Asn Phe Pro Val Val Glu  
 245 250 255  
 Ala Ser Trp Ser Met Leu His Asp Glu Arg Pro Tyr Leu Cys Asn Phe  
 260 265 270  
 Leu Gly Thr Ile Tyr Glu Asn Ser Ser Arg Gln Ala Leu Met Asn Ile  
 275 280 285  
 Leu Lys Lys Asp Gly Asn Asp Lys Leu Cys Trp Val Ser Ala Arg Glu  
 290 295 300  
 His Trp Gln Pro Gln Glu Thr Asn Glu Ser Leu Lys Asn Tyr Gln Asp  
 305 310 315 320  
 Ala Leu Leu Gln Ser Asp Leu Thr Leu Cys Pro Val Gly Val Asn Thr  
 325 330 335  
 Glu Cys Tyr Arg Ile Tyr Glu Ala Cys Ser Tyr Gly Ser Ile Pro Val  
 340 345 350  
 Val Glu Asp Val Met Thr Ala Gly Asn Cys Gly Asn Thr Ser Val His  
 355 360 365  
 His Gly Ala Pro Leu Gln Leu Leu Lys Ser Met Gly Ala Pro Phe Ile  
 370 375 380  
 Phe Ile Lys Asn Trp Lys Glu Leu Pro Ala Val Leu Glu Lys Glu Lys  
 385 390 395 400

208110 2222500T



Thr Ile Ile Leu Gln Glu Lys Ile Glu Arg Arg Lys Met Leu Leu Gln  
 405 410 415  
 Trp Tyr Gln His Phe Lys Thr Glu Leu Lys Met Lys Phe Thr Asn Ile  
 420 425 430  
 Leu Glu Ser Ser Phe Leu Met Asn Asn Lys Ser  
 435 440

<210> 60  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens

<400> 60  
 Met Tyr Ala Ser Val Leu Leu Thr Gly Leu Leu Ser Leu Gln Arg Cys  
 1 5 10 15  
 Leu Ala Val Thr Arg Pro Ser Trp Arg Leu Gly Cys Ala Ala Arg Pro  
 20 25 30  
 Gly Pro Pro Leu Leu Leu Ala Val Trp Leu Ala Ala Leu Leu Leu Ala  
 35 40 45  
 Val Pro Ala Ala Val Tyr Arg His Leu Trp Arg Asp Arg Val Cys Gln  
 50 55 60  
 Leu Cys His Pro Ser Pro Val His Ala Ala Ala His Leu Ser Leu Glu  
 65 70 75 80  
 Thr Leu Thr Ala Phe Val Leu Pro Phe Gly Leu Met Leu Gly Cys Tyr  
 85 90 95  
 Ser Val Thr Leu Ala Arg Leu Arg Gly Ala Arg Trp Gly Ser Gly Arg  
 100 105 110  
 His Gly Ala Arg Val Gly Arg Leu Val Ser Ala Ile Val Leu Pro Ser  
 115 120 125  
 Ala Cys Ser Gly Pro Pro Thr Thr Gln Ser Thr Phe Cys Arg Arg Ser  
 130 135 140  
 Gln Arg Trp Leu His Arg Lys Gly Pro Trp Arg Ser Trp Ala Glu Pro  
 145 150 155 160  
 Ala Arg Arg Arg Glu Arg Glu Leu Arg Pro Trp Pro Ser Ser Val Leu  
 165 170 175  
 Ala Ser Thr Arg Cys Ser Thr Ser Ser Pro Leu Glu Ile Cys Cys Pro  
 180 185 190  
 Gly Gln Val Pro Val Ser Ser Arg Gly Ser Ser Lys Ala Leu Gly Arg  
 195 200 205  
 Pro Glu Gly  
 210

<210> 61  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE

10050883-014502

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 61

Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr	Gly	Leu	Ala	Met
1				5					10					15	

Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser	Val	Leu	Tyr	Val
		20						25					30		

Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe	Trp	Phe	Gly	Thr
		35					40					45			

Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu	Gly	Phe	Asn	Tyr
	50					55					60				

Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly	Asn	Leu	Val	Gly
65					70					75					80

His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met	Asp	Leu	Gly	Gly
				85					90					95	

Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg	Trp	Leu	Pro	Ser
			100					105					110		

Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro	Ala	Ser	Met	Arg
		115					120					125			

Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Xaa	Gly	Arg	His	Asn	Trp	Gly	Gln
	130					135					140				

Gly	Phe	Arg	Leu	Gly	Asp	Gln
145					150	

&lt;210&gt; 62

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 62

Met	Ser	Arg	Ser	Val	Ala	Leu	Ala	Val	Leu	Ala	Leu	Leu	Ser	Leu	Ser
1				5					10					15	

Gly	Leu	Glu	Ala	Ile	Gln	Arg	Glu	Ser	Ser	Pro	Thr	Leu	Pro	Ala	Leu
		20						25					30		

Val	Leu	Pro	Leu	Pro	Leu	Cys	Thr	Leu	Cys	Gly	Pro	Arg	Cys	Ala	Leu
		35					40					45			

Ser	Leu	Arg	Asp	Phe	Pro	Ser	Pro	Ser	Ser	Pro	Trp	Trp	Pro	Ala	Val
	50					55					60				

Gly	Leu	Val	Gln	Gly	Trp	Ile	Ser	Gly	Lys	Arg	Arg	Gly	Gly	Leu	Gly
65					70					75					80

Val	Gly	Lys	Gly	Val	Arg	Thr	Arg	Asp	Ala	Arg	Tyr	Leu	Pro	Leu	Ser
				85					90					95	

Ala	Gly	Ser	Arg	Gly	Asp	Leu	Trp	Pro	Thr	Ala	Thr	Gly	Gly	Ser	Gly
			100					105					110		

Gln	Ser	Leu	Gly	Arg	Arg
		115			

0050663 011802

<210> 63  
 <211> 322  
 <212> PRT  
 <213> Homo sapiens

<400> 63

Met Ala Val Ile Ile Gly Val Ala Val Gly Ala Gly Val Ala Phe Leu  
 1 5 10 15  
 Val Leu Met Ala Thr Ile Val Ala Phe Cys Cys Ala Arg Ser Gln Arg  
 20 25 30  
 Asn Leu Lys Gly Val Val Ser Ala Lys Asn Asp Ile Arg Val Glu Ile  
 35 40 45  
 Val His Lys Glu Pro Ala Ser Gly Arg Glu Gly Glu Glu His Ser Thr  
 50 55 60  
 Ile Lys Gln Leu Met Met Asp Arg Gly Glu Phe Gln Gln Asp Ser Val  
 65 70 75 80  
 Leu Lys Gln Leu Glu Val Leu Lys Glu Glu Glu Lys Glu Phe Gln Asn  
 85 90 95  
 Leu Lys Asp Pro Thr Asn Gly Tyr Tyr Ser Val Asn Thr Phe Lys Glu  
 100 105 110  
 His His Ser Thr Pro Thr Ile Ser Leu Ser Ser Cys Gln Pro Asp Leu  
 115 120 125  
 Arg Pro Ala Gly Lys Gln Arg Val Pro Thr Gly Met Ser Phe Thr Asn  
 130 135 140  
 Ile Tyr Ser Thr Leu Ser Gly Gln Gly Arg Leu Tyr Asp Tyr Gly Ser  
 145 150 155 160  
 Gly Leu Cys Trp Ala Trp Ala Ala Arg Pro Ser Ser Phe Val Ser Gly  
 165 170 175  
 Ser Ser Arg Glu Ala Pro Ser Ala Thr Ala Ala Pro Ser Trp Thr Arg  
 180 185 190  
 Ser Val Thr Ala Ala Ser Ala Ala Ala Ala Ser Arg Met Ala Met Cys  
 195 200 205  
 Ser Ser Thr Arg Pro Ala Arg Leu Leu Leu Pro Pro Pro Thr Thr Pro  
 210 215 220  
 Ser Pro Arg Pro Arg Thr Leu Thr Pro Val Asp Pro Cys Ser Gly Gly  
 225 230 235 240  
 Cys Arg Leu Thr Ser Lys Asp His Thr Pro Arg Val Gly Thr Gly Gln  
 245 250 255  
 Gly Arg Gly Gln Gly Thr Phe Trp Leu Ser Arg Asp Glu Gly Tyr Phe  
 260 265 270  
 Ala Glu Asp Thr Arg Ile Gly His Phe Gln Asp Ser Leu Pro Ala Pro  
 275 280 285  
 Leu Pro Leu Pro Ser Phe Glu Ala Leu Ile Lys His Lys Ser Gly Ser  
 290 295 300  
 Pro Gly Ala Val Cys Gln Arg Trp Ala Gly Gly Glu Thr Asp Arg Gly  
 305 310 315 320

20050302 011302

Cys Gly

<210> 64  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 64  
 Met Ala Gln Cys Cys Leu Trp Leu Gly Ser Trp Val Leu Asp Met Ala  
 1 5 10 15

Ser Cys Ser Pro Phe Ser Thr Gly Ile Trp Lys Thr Ser Met Glu Leu  
 20 25 30

Gln Pro Ser Leu Gly Ser Val Gln Ser  
 35 40

<210> 65  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (73)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (106)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 65  
 Met Arg Thr Cys Gly Ile Trp Phe Cys Phe Cys Thr Ser Ser Leu Arg  
 1 5 10 15

Ile Met Ala Ser Ser Phe Thr Tyr Val Ala Ala Lys Asn Met Ile Ser  
 20 25 30

Leu Leu Leu Trp Leu His Ser Glu Met Gly Lys Val Pro Leu Ser Pro  
 35 40 45

Ser Gln Gly Val Arg Trp Gly Cys Asp Ser Leu Leu Gln Cys Pro Ala  
 50 55 60

Ala Gln Thr Ser Met Gly Gly Met Xaa Thr Gly Arg Leu Trp Gly Ser  
 65 70 75 80

Asp Pro Lys Ala Val Ser Arg Gly Glu Ala Pro Val Gly Val Cys Tyr  
 85 90 95

Arg Val Leu Phe Gln Phe Ser Arg Pro Xaa Ala Ala Cys Val Leu Ser  
 100 105 110

Ser Ile Arg Pro Leu Pro Tyr Arg Lys Asp Arg Gly Leu Ser Val Ser  
 115 120 125

Leu Gly Ser Cys Leu Gly Val Leu Glu Glu Ser Asp His Thr Trp Ala  
 130 135 140

Trp Arg Leu Ser Thr Arg Phe Cys  
 145 150

20050603 011300

<210> 66  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 66  
 Met Ile Leu Phe Leu Leu Leu Pro Leu Pro Cys Gly Ala Phe Leu Gln  
           1                  5                  10                  15  
 Phe Phe Thr Trp Leu Thr Leu Thr Gln Pro Leu Lys Phe Ser Ser Gly  
                   20                  25                  30  
 Ala Ile Ser Ser Xaa Lys Gly Thr Ser Xaa Ser Pro Asp  
           35                  40                  45

<210> 67  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 67  
 Met Gly His Tyr Leu Leu Leu Thr Leu His Pro Pro Ala Thr His  
           1                  5                  10                  15  
 Pro Ser Leu Ser Arg Val Leu Cys Val Leu Trp Cys Leu Ser Leu Trp  
                   20                  25                  30  
 Thr Gly Gln Lys Ile Thr Gln Asp Asn Ala Met Pro Phe Thr Leu Asp  
           35                  40                  45  
 Ser Val Val Phe Met Phe Ser Gln Leu Glu Cys Phe Ser Leu Met Ala  
           50                  55                  60  
 Ala Thr Gly Ser Tyr Ile Val Leu  
           65                  70

<210> 68  
 <211> 362  
 <212> PRT  
 <213> Homo sapiens

<400> 68  
 Met Thr Leu Ile Glu Gly Val Gly Asp Glu Val Thr Val Leu Phe Ser  
           1                  5                  10                  15  
 Val Leu Ala Cys Leu Leu Val Leu Ala Leu Ala Trp Val Ser Thr His  
                   20                  25                  30  
 Thr Ala Glu Gly Gly Asp Pro Leu Pro Gln Pro Ser Gly Thr Pro Thr  
           35                  40                  45  
 Pro Ser Gln Pro Ser Ala Ala Met Ala Ala Thr Asp Ser Met Arg Gly  
           50                  55                  60

10050883 011001

Glu Ala Pro Gly Ala Glu Thr Pro Ser Leu Arg His Arg Gly Gln Ala  
 65 70 75 80  
 Ala Gln Pro Glu Pro Ser Thr Gly Phe Thr Ala Thr Pro Pro Ala Pro  
 85 90 95  
 Asp Ser Pro Gln Glu Pro Leu Val Leu Arg Leu Lys Phe Leu Asn Asp  
 100 105 110  
 Ser Glu Gln Val Ala Arg Ala Trp Pro His Asp Thr Ile Gly Ser Leu  
 115 120 125  
 Lys Arg Thr Gln Phe Pro Gly Arg Glu Gln Gln Val Arg Leu Ile Tyr  
 130 135 140  
 Gln Gly Gln Leu Leu Gly Asp Asp Thr Gln Thr Leu Gly Ser Leu His  
 145 150 155 160  
 Leu Pro Pro Asn Cys Val Leu His Cys His Val Ser Thr Arg Val Gly  
 165 170 175  
 Pro Pro Asn Pro Pro Cys Pro Pro Gly Ser Glu Pro Arg Pro Leu Arg  
 180 185 190  
 Ala Gly Asn Arg Gln Pro Ala Ala Ala Pro Ala Ala Val Ala  
 195 200 205  
 Ala Ala Leu Val Leu Pro Asp Pro Val Pro Ala Leu Leu Ser Pro Asp  
 210 215 220  
 Arg His Ser Gly Pro Gly Arg Leu His Pro Ala Pro Gln Ser Pro Gly  
 225 230 235 240  
 Leu Cys His Val Pro Pro Val Val Pro Pro Arg Ala Leu Gly Ser Val  
 245 250 255  
 Ala Gly Pro Ser Gly Pro Cys Ser Pro Arg Arg Gly Gly Ser Cys Cys  
 260 265 270  
 Leu Pro Arg Pro Ala Ser Pro Ala Cys Leu Phe Pro Leu Pro Trp Ser  
 275 280 285  
 Pro Ala Leu Arg Arg Arg Gly Leu Pro Gly Leu Ala Glu Ala Pro Pro  
 290 295 300  
 Cys Asp Arg Arg Gly Ser Gly Pro Pro Pro Gly Ala Ala Asp Pro Gln  
 305 310 315 320  
 Pro Ala Leu Gly Val Gly Ser Ser Gly Ser Gly Ile Cys Cys Arg Cys  
 325 330 335  
 Leu Gly Pro Gly Gln Ser Arg Ala Ala Pro Gly Ala Arg Leu Ser Val  
 340 345 350  
 Leu Pro Glu Asp Pro Ala Ala Ser Asn Pro  
 355 360

<210> 69  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 69  
 Met Ala Ser Leu Arg Ser Gln His Gly Pro Gly Ala Pro Glu Ser Leu

```

<210> 70
<211> 90
<212> PRT
<213> Homo sapiens

<400> 70
Met Ala Val Thr Trp Arg Gln Ala Leu Leu Arg Ala Leu Cys Ile Ser
  1                      5                      10                      15

Gly Val Cys Ser Gln Gly Lys Trp Lys Arg Phe Phe Gln Ser Ser Thr
                20                      25                      30

Ala His Pro Ser Met Arg Trp Arg Gly Arg Pro Leu Ala Arg Thr Leu
  35                      40                      45

Ser Val Trp Thr Lys Asp Ala Lys Leu Cys Cys Gly His Ser Thr Asp
  50                      55                      60

Gly Ala Leu Arg Ala Gly Arg Thr Pro Val Pro Ser Ser Glu Glu Ala
  65                      70                      75                      80

His Gly Leu Leu Gln Pro Cys Pro Gly Arg
                85                      90

```

```

<210> 71
<211> 43
<212> PRT
<213> Homo sapiens

<400> 71
Met Arg Trp Ile Trp Leu Thr Leu Thr Phe Gly Ile Thr Ser Gln Leu
 1             5             10             15
Ala Ser Gly Lys Leu Ser Lys Tyr Trp Ala Ile Val Phe Glu Asp Arg
          20             25             30
Ser Leu Glu Ser Tyr Val Ser Lys Phe Lys Cys
      35             40

```

```
<210> 72
<211> 53
<212> PRT
<213> Homo sapiens
```

&lt;400&gt; 72

Met Leu Met Arg Tyr Lys Ser Tyr Phe Phe Ile Ser Ile Leu Leu Leu  
 1 5 10 15

Cys Cys Phe Phe Phe Leu Ile Leu Gln Val Tyr Lys Leu Ser Phe Lys  
 20 25 30

Ile Leu Ser Gln Asp Phe Lys Asn Cys Arg Val Leu Val Trp Arg Ser  
 35 40 45

Leu Pro Ser Phe Ser  
 50

&lt;210&gt; 73

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 73

Met Ser Phe Leu Gly Phe Ile Leu Asn Leu Gly Ala Arg Leu Ile Val  
 1 5 10 15

Gln Pro Gln Ala Ala Leu Ala Ser Arg Gly Leu Arg Gly Gln Gly Leu  
 20 25 30

Pro Cys Glu Thr Gln Val Cys Lys Arg Thr Leu Arg Pro Gly Ala Val  
 35 40 45

Gly Trp Leu Val His Lys Gly Arg Arg Ala Leu Ser Ile Ser Arg Lys  
 50 55 60

Ser Ala Leu Val Ser Leu Gly Val Met Tyr Val Gly Pro Gly Lys Arg  
 65 70 75 80

Pro Gly Val Val Arg Lys His Ser Leu Leu Val Lys Met Gln Ala Arg  
 85 90 95

Gly Lys Glu Val Ser Pro Thr Met Cys  
 100 105

&lt;210&gt; 74

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 74

Met Trp Leu Leu Cys Val Ala Leu Ala Val Leu Ala Trp Gly Phe Leu  
 1 5 10 15

40050882-011800



Trp Val Trp Asp Ser Ser Glu Arg Met Lys Ser Arg Glu Gln Gly Gly  
                   20                  25                  30  
 Arg Leu Gly Ala Glu Ser Arg Thr Leu Leu Val Ile Ala His Pro Xaa  
                   35                  40                  45  
 Xaa Glu Ala Met Phe Phe Ala Pro Thr Val Leu Gly Leu Ala Arg Leu  
                   50                  55                  60  
 Arg His Trp Val Tyr Leu Leu Cys Phe Ser Ala Val Phe Xaa Arg Glu  
                   65                  70                  75                  80  
 Leu Ser Glu Tyr Thr Glu Val Leu Pro Leu Asn Pro Ser Gln Pro Arg  
                   85                  90                  95  
 Asp Arg Ser Gly Arg Leu Thr Trp Trp Val Gly Gly Arg Arg Gln Leu  
                   100                  105                  110  
 Ala Tyr Tyr Ala Ser Arg Ile Glu Glu Gln Arg Asn Ser Cys Ser Trp  
                   115                  120                  125  
 Leu Tyr Ser Val Pro Ala Phe Pro Leu Gly Thr Pro Pro Val Leu Val  
                   130                  135                  140  
 Ile Leu Trp Asn Phe Phe Leu Phe Val Glu Gly Ala Arg Ile Leu Thr  
                   145                  150                  155                  160  
 Leu Leu Tyr Ser Thr Arg Asn Asn Leu Cys Cys Ile Val Pro Ala Gln  
                   165                  170                  175  
 Ser Leu Lys Leu Thr Ser Asn Asp Ser Lys Arg Pro Ser Cys Cys Leu  
                   180                  185                  190

<210> 75  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 75  
 Met Trp Arg Cys Ile Phe Ser Met Met Cys Phe Ala Val Leu Leu Glu  
   1                  5                  10                  15  
 Gly Ser Phe Ser Glu Ile Ser Leu Ser Ile Ser Ser Ser Ser Leu Phe  
                   20                  25                  30  
 Arg Gly Trp Pro Arg Asp Ser Val Leu Ser Asp Thr Arg Leu Ala Arg  
                   35                  40                  45  
 Thr Leu Ser Thr Asp Ser Thr Phe  
                   50                  55

<210> 76  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 76  
 Met Thr Pro Ser Leu Leu Ser Glu Lys Leu Cys Ser Leu Phe Phe Val  
   1                  5                  10                  15

10550882-011800

Leu Leu Gly Ile Ala Ser Ala Ala Phe Val Ser Ala Leu Trp Ala Trp  
                   20                                  25                                  30

Ser Ser His Thr Glu Arg Leu Thr Ala Glu Pro Ser Ser Ser Ile Thr  
                   35                                  40                                  45

Cys Leu Ser Pro Pro Trp Phe Phe Phe Pro Phe  
           50                                  55

<210> 77

<211> 385

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (269)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (348)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 77

Met Trp Gly Phe Arg Leu Leu Arg Ser Pro Pro Leu Leu Leu Leu Leu  
   1                                  5                                  10                                  15

Pro Gln Leu Gly Ile Gly Asn Ala Ser Ser Cys Ser Gln Ala Arg Thr  
                   20                                  25                                  30

Met Asn Pro Gly Gly Ser Gly Gly Ala Arg Cys Ser Leu Ser Ala Glu  
                   35                                  40                                  45

Val Arg Arg Arg Gln Cys Leu Gln Leu Ser Thr Val Pro Gly Ala Xaa  
   50                                  55                                  60

Pro Gln Arg Xaa Asn Glu Leu Leu Leu Leu Ala Ala Ala Gly Glu Gly  
   65                                  70                                  75                                  80

Leu Glu Arg Gln Asp Leu Pro Gly Asp Pro Ala Lys Glu Glu Pro Gln  
                   85                                  90                                  95

Pro Pro Pro Gln His His Val Leu Tyr Phe Pro Gly Asp Val Gln Asn  
                   100                                  105                                  110

Tyr His Glu Ile Met Thr Arg His Pro Glu Asn Tyr Gln Trp Glu Asn  
                   115                                  120                                  125

Trp Ser Leu Glu Asn Val Ala Thr Ile Leu Ala His Arg Phe Pro Asn

20050909.041900

130 135 140

Ser Tyr Ile Trp Val Ile Lys Cys Ser Arg Met His Leu His Xaa Phe  
 145 150 155 160

Ser Cys Tyr Asp Asn Phe Val Lys Ser Asn Met Phe Gly Ala Pro Glu  
 165 170 175

His Asn Thr Asp Phe Gly Ala Phe Lys His Leu Tyr Met Leu Leu Val  
 180 185 190

Asn Ala Phe Asn Leu Ser Gln Asn Ser Leu Ser Lys Lys Ser Leu Asn  
 195 200 205

Val Trp Asn Lys Asp Ser Ile Ala Ser Asn Cys Arg Ser Ser Pro Ser  
 210 215 220

His Thr Thr Asn Gly Cys Gln Gly Glu Lys Val Arg Thr Cys Glu Lys  
 225 230 235 240

Ser Asp Glu Ser Ala Met Ser Phe Tyr Pro Pro Ser Leu Asn Asp Ala  
 245 250 255

Ser Phe Thr Leu Ile Gly Phe Ser Lys Gly Cys Val Xaa Leu Asn Gln  
 260 265 270

Leu Leu Phe Glu Leu Lys Glu Ala Lys Lys Asp Lys Asn Ile Asp Ala  
 275 280 285

Phe Ile Lys Ser Ile Arg Thr Met Tyr Trp Leu Asp Gly Gly His Ser  
 290 295 300

Gly Gly Ser Asn Thr Trp Val Thr Tyr Pro Glu Val Leu Lys Glu Phe  
 305 310 315 320

Ala Gln Thr Gly Ile Ile Val His Thr His Val Thr Pro Tyr Gln Val  
 325 330 335

Arg Asp Pro Met Arg Ser Trp Ile Gly Lys Glu Xaa Lys Lys Phe Val  
 340 345 350

Gln Ile Leu Gly Asp Leu Gly Met Gln Val Thr Ser Gln Ile His Phe  
 355 360 365

Thr Lys Glu Ala Pro Ser Ile Glu Asn His Phe Arg Val His Glu Val  
 370 375 380

Phe  
 385

<210> 78  
 <211> 292  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (288)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (289)  
 <223> Xaa equals any of the naturally occurring L-amino acids

10050882 011909

&lt;400&gt; 78

Met Asn Leu Cys Val Ile Leu Leu Ile Leu Val Phe Met Val Pro Phe  
 1 5 10 15

Tyr Ile Gly Tyr Phe Ile Val Ser Asn Ile Arg Leu Leu His Lys Gln  
 20 25 30

Arg Leu Leu Phe Ser Cys Leu Leu Trp Leu Thr Phe Met Tyr Phe Phe  
 35 40 45

Trp Lys Leu Gly Asp Pro Phe Pro Ile Leu Ser Pro Lys His Gly Ile  
 50 55 60

Leu Ser Ile Glu Gln Leu Ile Ser Arg Val Gly Val Ile Gly Val Thr  
 65 70 75 80

Leu Met Ala Leu Leu Ser Gly Phe Gly Ala Val Asn Cys Pro Tyr Thr  
 85 90 95

Tyr Met Ser Tyr Phe Leu Arg Asn Val Thr Asp Thr Asp Ile Leu Ala  
 100 105 110

Leu Glu Arg Arg Leu Leu Gln Thr Met Asp Met Ile Ile Ser Lys Lys  
 115 120 125

Lys Arg Met Ala Met Ala Arg Arg Thr Met Phe Gln Lys Gly Glu Val  
 130 135 140

His Asn Lys Pro Ser Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr  
 145 150 155 160

Ser Ala Ser Gly Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp  
 165 170 175

Ala Leu Glu Glu Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu  
 180 185 190

Tyr Ala Thr Lys Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys  
 195 200 205

Tyr Phe Asn Phe Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys  
 210 215 220

Ile Phe Met Ala Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys Thr  
 225 230 235 240

Asp Pro Val Thr Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu Gly Ile  
 245 250 255

Gln Phe Asp Val Lys Phe Trp Ser Gln His Ile Ser Phe Ile Leu Val  
 260 265 270

Gly Ile Ile Ile Val Thr Ser Ile Arg Gly Leu Leu Ile Thr Leu Xaa  
 275 280 285

Xaa Val Ile Leu  
 290

&lt;210&gt; 79

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 79

Met Ile Trp Leu Ser Val Cys Leu Leu Leu Val Tyr Lys Asn Ala Cys

10050882-011602

```

<210> 80
<211> 1010
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (362)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (525)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (643)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (649)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (656)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (660)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

```

<221> SITE  
 <222> (731)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (770)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (777)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (790)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (800)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (825)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (987)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (996)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (1003)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 80  
 Met Lys Ala Glu Ile Lys Met Phe Phe Glu Thr Asn Glu Asn Lys Asp  
   1                  5                  10                  15  
 Thr Thr Tyr Gln Asn Leu Trp Asp Xaa Phe Lys Ala Val Cys Arg Gly  
           20                  25                  30  
 Lys Phe Ile Ala Leu Asn Ala His Lys Arg Lys Gln Glu Arg Ser Lys  
       35                  40                  45  
 Ile Asp Thr Leu Thr Ser Gln Leu Lys Glu Leu Glu Lys Gln Glu Gln  
       50                  55                  60  
 Thr His Ser Lys Ala Ser Arg Arg Gln Glu Ile Thr Lys Ile Arg Ala  
       65                  70                  75                  80  
 Glu Leu Lys Glu Ile Glu Thr Gln Lys Thr Leu Gln Lys Ile Asn Glu  
           85                  90                  95  
 Ser Arg Ser Trp Phe Phe Glu Xaa Ile Asn Lys Ile Asp Arg Pro Leu  
       100                  105                  110

1050882-011802

Ala Arg Leu Ile Lys Lys Lys Arg Glu Lys Asn Gln Ile Asp Ala Ile  
 115 120 125  
 Lys Asn Asp Lys Gly Asp Ile Thr Thr Asp Pro Thr Glu Ile Gln Thr  
 130 135 140  
 Thr Ile Arg Glu Tyr Tyr Lys His Leu Tyr Ala Asn Lys Leu Glu Asn  
 145 150 155 160  
 Leu Glu Glu Met Asp Lys Phe Leu Asp Thr Tyr Thr Leu Pro Arg Leu  
 165 170 175  
 Asn Gln Glu Glu Val Glu Ser Leu Asn Arg Pro Ile Thr Gly Ser Glu  
 180 185 190  
 Ile Xaa Ala Ile Ile Asn Ser Leu Pro Thr Lys Lys Ser Pro Gly Pro  
 195 200 205  
 Asp Gly Phe Thr Ala Glu Phe Tyr Gln Arg Tyr Lys Glu Glu Leu Val  
 210 215 220  
 Pro Phe Leu Leu Lys Leu Phe Gln Ser Ile Glu Lys Glu Gly Ile Leu  
 225 230 235 240  
 Pro Asn Ser Phe Tyr Glu Ala Ser Ile Ile Leu Ile Pro Lys Pro Gly  
 245 250 255  
 Arg Asp Thr Thr Lys Lys Glu Asn Phe Arg Pro Ile Ser Leu Met Asn  
 260 265 270  
 Ile Asp Ala Lys Ile Leu Asn Lys Ile Leu Ala Asn Arg Ile Gln Gln  
 275 280 285  
 His Ile Lys Lys Leu Ile His His Asp Gln Val Gly Phe Ile Pro Gly  
 290 295 300  
 Met Gln Gly Trp Phe Asn Ile Arg Lys Ser Ile Asn Val Ile Gln His  
 305 310 315 320  
 Ile Asn Arg Thr Lys Asp Lys Asn His Met Ile Ile Ser Ile Asp Ala  
 325 330 335  
 Glu Lys Ala Phe Asp Lys Ile Gln Gln Pro Phe Met Leu Lys Thr Leu  
 340 345 350  
 Asn Lys Leu Gly Ile Asp Gly Thr Tyr Xaa Lys Ile Ile Arg Ala Ile  
 355 360 365  
 Tyr Asp Lys Pro Thr Ala Asn Ile Ile Leu Asn Gly Gln Lys Leu Glu  
 370 375 380  
 Ala Phe Pro Leu Lys Thr Gly Thr Arg Gln Gly Cys Pro Leu Ser Pro  
 385 390 395 400  
 Leu Leu Phe Asn Ile Val Leu Glu Val Leu Ala Arg Ala Ile Arg Gln  
 405 410 415  
 Glu Lys Glu Ile Lys Gly Ile Gln Leu Gly Lys Glu Glu Val Lys Leu  
 420 425 430  
 Ser Leu Phe Ala Asp Asp Met Ile Val Tyr Leu Glu Asn Pro Ile Val  
 435 440 445  
 Ser Ala Gln Asn Leu Leu Lys Leu Ile Ser Asn Phe Ser Lys Val Ser  
 450 455 460

10050882-011800

Gly Tyr Lys Ile Asn Val Gln Lys Ser Gln Ala Phe Leu Tyr Thr Asn  
 465 470 475 480  
 Asn Arg Gln Thr Glu Ser Gln Ile Met Ser Glu Leu Pro Phe Thr Ile  
 485 490 495  
 Ala Ser Lys Arg Ile Lys Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val  
 500 505 510  
 Lys Asp Leu Phe Lys Glu Asn Tyr Lys Pro Leu Leu Xaa Glu Ile Lys  
 515 520 525  
 Glu Asp Thr Asn Lys Trp Lys Asn Ile Pro Cys Ser Trp Val Gly Arg  
 530 535 540  
 Ile Asn Ile Val Lys Met Ala Ile Leu Pro Lys Val Ile Tyr Arg Phe  
 545 550 555 560  
 Asn Ala Ile Pro Ile Lys Leu Pro Met Thr Phe Phe Thr Glu Leu Glu  
 565 570 575  
 Lys Thr Thr Leu Lys Phe Ile Trp Asn Gln Lys Arg Ala Arg Ile Ala  
 580 585 590  
 Lys Ser Ile Leu Ser Gln Lys Asn Lys Ala Gly Gly Ile Thr Leu Pro  
 595 600 605  
 Asp Phe Lys Leu Tyr Tyr Lys Ala Thr Val Thr Lys Thr Ala Trp Tyr  
 610 615 620  
 Trp Tyr Gln Asn Arg Asp Ile Asp Gln Trp Asn Arg Thr Glu Pro Ser  
 625 630 635 640  
 Glu Ile Xaa Pro His Ile Tyr Asn Xaa Leu Ile Phe Asp Lys Pro Xaa  
 645 650 655  
 Lys Asn Lys Xaa Trp Gly Lys Asp Ser Leu Phe Asn Lys Trp Cys Trp  
 660 665 670  
 Glu Asn Trp Leu Ala Ile Cys Arg Lys Leu Lys Leu Asp Pro Phe Leu  
 675 680 685  
 Thr Pro Tyr Thr Lys Ile Asn Ser Arg Trp Ile Lys Asp Leu Asn Val  
 690 695 700  
 Arg Pro Lys Thr Ile Lys Thr Leu Glu Glu Asn Leu Gly Asn Thr Ile  
 705 710 715 720  
 Gln Asp Ile Gly Met Gly Lys Asp Phe Met Xaa Lys Thr Pro Lys Ala  
 725 730 735  
 Met Ala Thr Lys Ala Lys Ile Asp Lys Trp Asp Leu Ile Lys Leu Lys  
 740 745 750  
 Ser Phe Cys Thr Ala Lys Glu Thr Thr Ile Arg Val Asn Arg Gln Pro  
 755 760 765  
 Thr Xaa Trp Glu Lys Ile Phe Ala Xaa Tyr Ser Ser Asp Lys Gly Leu  
 770 775 780  
 Ile Ser Arg Ile Tyr Xaa Glu Leu Lys Gln Ile Tyr Lys Lys Lys Xaa  
 785 790 795 800  
 Asn Asn Pro Ile Lys Lys Trp Ala Lys Asp Met Asn Arg His Phe Ser  
 805 810 815

10050932-011802  
 2007-10-23 09:50:01



Lys Glu Asp Ile Tyr Ala Ala Lys Xaa His Met Lys Lys Cys Ser Ser  
 820 825 830  
 Ser Leu Ala Ile Arg Glu Met Gln Ile Lys Thr Thr Met Arg Tyr His  
 835 840 845  
 Leu Thr Pro Val Arg Met Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg  
 850 855 860  
 Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu Leu His Cys Trp Trp  
 865 870 875 880  
 Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser Val Trp Arg Phe Leu  
 885 890 895  
 Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp Pro Ala Ile Pro Leu Leu  
 900 905 910  
 Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys Cys Tyr Lys Asp Thr Cys  
 915 920 925  
 Thr Arg Met Phe Ile Ala Ala Leu Phe Thr Ile Ala Lys Thr Trp Asn  
 930 935 940  
 Gln Pro Lys Cys Pro Thr Met Ile Asp Trp Ile Lys Lys Met Trp His  
 945 950 955 960  
 Ile Tyr Thr Met Glu Tyr Tyr Ala Ala Ile Lys Asn Asp Glu Phe Met  
 965 970 975  
 Ser Phe Val Gly Thr Trp Met Lys Leu Glu Xaa Ile Ile Leu Ser Lys  
 980 985 990  
 Leu Ser Gln Xaa Gln Lys Thr Lys His Arg Xaa Phe Ser Leu Ile Gly  
 995 1000 1005  
 Gly Asn  
 1010

<210> 81  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Met Arg Leu Thr Arg Lys Arg Leu Cys Ser Phe Leu Ile Ala Leu Tyr  
 1 5 10 15  
 Cys Leu Phe Ser Leu Tyr Ala Ala Tyr His Val Phe Phe Gly Arg Arg  
 20 25 30  
 Arg Gln Ala Pro Ala Gly Ser Pro Arg Gly Leu Arg Lys Gly Ala Ala  
 35 40 45  
 Pro Ala Arg Glu Arg Arg Gly Arg Glu Gln Ser Thr Leu Glu Ser Glu  
 50 55 60  
 Glu Trp Asn Pro Trp Glu Gly Asp Glu Lys Asn Glu Gln Gln His Arg  
 65 70 75 80  
 Phe Lys Thr Ser Leu Gln Ile Leu Asp Lys Ser Thr Lys Gly Lys Thr  
 85 90 95  
 Asp Leu Ser Val Gln Ile Trp Gly Lys Ala Ala Ile Val Gln Ala Gly  
 100 105 110

10050882-014802

Ser Val Ser Ala His Lys Thr Phe  
115 120

<210> 82  
<211> 77  
<212> PRT  
<213> Homo sapiens

<400> 82  
Met Tyr Ala Ser Val Leu Leu Thr Gly Leu Leu Ser Leu Gln Arg Cys  
1 5 10 15  
Leu Ala Val Thr Arg Pro Phe Leu Ala Pro Arg Cys Ala Ala Arg Pro  
20 25 30  
Trp Pro Ala Ala Cys Cys Trp Arg Ser Gly Trp Pro Pro Cys Cys Ser  
35 40 45  
Pro Ser Arg Pro Pro Ser Thr Ala Thr Cys Gly Gly Thr Ala Tyr Ala  
50 55 60  
Ser Cys Ala Thr Arg Arg Arg Ser Thr Pro Pro Thr  
65 70 75

<210> 83  
<211> 256  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (184)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 83  
Met Lys Ser Gly Ala Gly Leu Glu Gln Ser Leu Cys Arg Trp Arg His  
1 5 10 15  
His Trp Gly Gly Arg Arg Ala Gly Val Ala Phe Leu Val Leu Met Ala  
20 25 30  
Thr Ile Val Ala Phe Cys Cys Ala Arg Ser Gln Arg Asn Leu Lys Gly  
35 40 45  
Val Val Ser Ala Lys Asn Asp Ile Arg Val Glu Ile Val His Lys Glu  
50 55 60  
Pro Ala Ser Gly Arg Glu Gly Glu Glu His Ser Thr Ile Lys Gln Leu  
65 70 75 80  
Met Met Asp Arg Gly Glu Phe Gln Gln Asp Ser Val Leu Lys Gln Leu  
85 90 95  
Glu Val Leu Lys Glu Glu Glu Lys Glu Phe Gln Asn Leu Lys Asp Pro  
100 105 110  
Thr Asn Gly Tyr Tyr Ser Val Asn Thr Phe Lys Glu His His Ser Thr  
115 120 125  
Pro Thr Ile Ser Leu Ser Ser Cys Gln Pro Asp Leu Arg Pro Ala Gly  
130 135 140  
Lys Gln Arg Val Pro Thr Gly Met Ser Phe Thr Asn Ile Tyr Ser Thr

100500002.011002

145                      150                      155                      160  
 Leu Ser Gly Gln Gly Pro Leu Arg Leu Arg Gln Arg Phe Val Leu Gly  
                                  165                      170                      175  
 Met Gly Ser Ser Ser Ile Glu Xaa Cys Glu Arg Glu Phe Gln Arg Gly  
                                  180                      185                      190  
 Ser Leu Ser Asp Ser Ser Ser Phe Leu Asp Thr Gln Cys Asp Ser Ser  
                                  195                      200                      205  
 Val Ser Ser Ser Gly Lys Gln Asp Gly Tyr Val Gln Phe Asp Lys Ala  
                                  210                      215                      220  
 Ser Lys Ala Ser Ala Ser Ser Ser His His Ser Gln Ser Ser Ser Gln  
                                  225                      230                      235                      240  
 Asn Ser Asp Pro Ser Arg Pro Leu Gln Arg Arg Met Gln Thr His Val  
                                  245                      250                      255

<210> 84  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 84  
 Met Thr Leu Ile Glu Gly Val Gly Asp Glu Val Thr Val Leu Phe Ser  
   1                                 5                                 10                                 15  
 Val Leu Ala Cys Leu Leu Val Leu Ala Leu Ala Trp Val Ser Thr His  
                                  20                                 25                                 30  
 Thr Ala Glu Gly Gly Asp Pro Leu Pro Gln Pro Ser Gly Thr Pro Thr  
                                  35                                 40                                 45  
 Pro Ser Gln Pro Ser Ala Ala Trp Gln Leu Pro Thr Ala  
                                  50                                 55                                 60

<210> 85  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 85  
 Met Glu Leu Ser Gly Ile Leu Trp Gln Phe Ser Ala Thr Ser Phe Pro  
   1                                 5                                 10                                 15  
 Ser Ser Gln Ala Ser Trp Pro  
                                  20

<210> 86  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Met Ala Val Thr Trp Arg Gln Ala Leu Leu Arg Ala Leu Cys Ile Ser  
   1                                 5                                 10                                 15  
 Gly Val Cys Ser Gln Gly Lys Trp Lys Arg Phe Phe Gln Ser Ser Thr

10050992-01102

```
<210> 87
<211> 90
<212> PRT
<213> Homo sapiens
```

```
<400> 87
Met Ala Val Thr Trp Xaa Gln Ala Leu Leu Arg Ala Leu Cys Ile Ser
  1             5             10            15
```

Ala His Pro Ser Met Arg Trp Arg Gly Arg Pro Leu Ala Arg Thr Leu  
35 40 45

Gly Ala Leu Arg Ala Gly Arg Thr Pro Val Pro Ser Ser Glu Glu Ala  
65 70 75 80

```
<210> 88
<211> 25
<212> PRT
<213> Homo sapiens
```

<400> 88  
Met Gln Ile Leu Leu Leu Phe Tyr Phe Ser Arg Phe Leu Ala Pro Ser  
1 5 10 15

```
<210> 89
<211> 50
<212> PRT
```

<213> Homo sapiens

<400> 89

Met Gly Ala Trp Pro Pro Cys Pro Ala Arg Ser Ser Arg Arg Arg Ser  
1 5 10 15  
Leu Ala Ala Trp Cys Val Ala Cys Cys Trp Ser Ser Arg Trp Ala Ala  
20 25 30  
Pro Ser Ser Ser Thr His Cys Ala Arg Arg Asn Thr Gly Pro Ser Arg  
35 40 45  
Pro Arg  
50

<210> 90

<211> 385

<212> PRT

<213> Homo sapiens

<400> 90

Met Trp Gly Phe Arg Leu Leu Arg Ser Pro Pro Leu Leu Leu Leu Leu  
1 5 10 15  
Pro Gln Leu Gly Ile Gly Asn Ala Ser Ser Cys Ser Gln Ala Arg Thr  
20 25 30  
Met Asn Pro Gly Gly Ser Gly Gly Ala Arg Cys Ser Leu Ser Ala Glu  
35 40 45  
Val Arg Arg Arg Gln Cys Leu Gln Leu Ser Thr Val Pro Gly Ala Glu  
50 55 60  
Pro Gln Arg Ser Asn Glu Leu Leu Leu Leu Ala Ala Ala Gly Glu Gly  
65 70 75 80  
Leu Glu Arg Gln Asp Leu Pro Gly Asp Pro Ala Lys Glu Glu Pro Gln  
85 90 95  
Pro Pro Pro Gln His His Val Leu Tyr Phe Pro Gly Asp Val Gln Asn  
100 105 110  
Tyr His Glu Ile Met Thr Arg His Pro Glu Asn Tyr Gln Trp Glu Asn  
115 120 125  
Trp Ser Leu Glu Asn Val Ala Thr Ile Leu Ala His Arg Phe Pro Asn  
130 135 140  
Ser Tyr Ile Trp Val Ile Lys Cys Ser Arg Met His Leu His Lys Phe  
145 150 155 160  
Ser Cys Tyr Asp Asn Phe Val Lys Ser Asn Thr Phe Gly Ala Pro Glu  
165 170 175  
His Asn Thr Asp Phe Gly Ala Phe Lys His Leu Tyr Met Leu Leu Val  
180 185 190  
Asn Ala Phe Asn Leu Ser Gln Asn Ser Leu Ser Lys Lys Ser Leu Asn  
195 200 205  
Val Trp Asn Lys Asp Ser Ile Ala Ser Asn Cys Arg Ser Ser Pro Ser  
210 215 220  
His Thr Thr Asn Gly Cys Gln Gly Glu Lys Val Arg Thr Cys Glu Lys  
225 230 235 240

208710-23805007

Ser Asp Glu Ser Ala Met Ser Phe Tyr Pro Pro Ser Leu Asn Asp Ala  
 245 250 255  
 Ser Phe Thr Leu Ile Gly Phe Ser Lys Gly Cys Val Val Leu Asn Gln  
 260 265 270  
 Leu Leu Phe Glu Leu Lys Glu Ala Lys Lys Asp Lys Asn Ile Asp Ala  
 275 280 285  
 Phe Ile Lys Ser Ile Arg Thr Met Tyr Trp Leu Asp Gly Gly His Ser  
 290 295 300  
 Gly Gly Ser Asn Thr Trp Val Thr Tyr Pro Glu Val Leu Lys Glu Phe  
 305 310 315 320  
 Ala Gln Thr Gly Ile Ile Val His Thr His Val Thr Pro Tyr Gln Val  
 325 330 335  
 Arg Asp Pro Met Arg Ser Trp Ile Gly Lys Glu His Lys Lys Phe Val  
 340 345 350  
 Gln Ile Leu Gly Asp Leu Gly Met Gln Val Thr Ser Gln Ile His Phe  
 355 360 365  
 Thr Lys Glu Ala Pro Ser Ile Glu Asn His Phe Arg Val His Glu Val  
 370 375 380  
 Phe  
 385

<210> 91  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 91  
 Arg Pro Ser Trp Tyr Xaa Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser  
 1 5 10 15

Thr His Ala Ser Gly  
 20

<210> 92  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Gln Leu Asp Gly Val Gly Leu Glu Ser Arg Ser Pro Gly Cys Ser Thr  
 1 5 10 15

Trp Glu Lys Ala Asp Arg Val Arg Gly Pro Val Ala Gln Arg Ala Val  
 20 25 30

Ala Ser Gly Ser Gly Lys Trp Arg Gln Glu Pro Ser Leu His Phe Ala  
 35 40 45

Met Ser Phe Leu Ile Asp Ser Ser Ile Met Ile Thr Ser Gln Ile Leu

10050882-011802

50                      55                      60  
 Phe Phe Gly Phe Gly Trp Leu Phe Phe Met Arg Gln Leu Phe Lys Asp  
   65                      70                      75                      80  
 Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser Val Thr Phe  
                     85                      90                      95  
 Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe Glu Ile Leu Gly  
                     100                      105                      110  
 Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp Lys  
                     115                      120

<210> 93  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 93  
 Gln Leu Asp Gly Val Gly Leu Glu Ser Arg Ser Pro Gly Cys Ser Thr  
   1                      5                      10                      15  
 Trp Glu Lys Ala Asp Arg Val Arg Gly Pro Val Ala Gln Arg Ala Val  
                     20                      25                      30  
 Ala Ser Gly Ser Gly Lys Trp Arg Gln Glu Pro  
                     35                      40

<210> 94  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 94  
 Ser Leu His Phe Ala Met Ser Phe Leu Ile Asp Ser Ser Ile Met Ile  
   1                      5                      10                      15  
 Thr Ser Gln Ile Leu Phe Phe Gly Phe Gly Trp Leu Phe Phe Met Arg  
                     20                      25                      30  
 Gln Leu Phe Lys Asp Tyr Glu Ile Arg Gln Tyr Val  
                     35                      40

<210> 95  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 95  
 Val Gln Val Ile Phe Ser Val Thr Phe Ala Phe Ser Cys Thr Met Phe  
   1                      5                      10                      15  
 Glu Leu Ile Ile Phe Glu Ile Leu Gly Val Leu Asn Ser Ser Ser Arg  
                     20                      25                      30  
 Tyr Phe His Trp Lys  
                     35

<210> 96  
 <211> 43  
 <212> PRT

202410-23305001

<213> Homo sapiens

<400> 96

Pro Arg Val Arg Pro Cys Arg Gly Glu Ser Ala Gly Ala Ala Ala Ala  
1 5 10 15

Ala Val Pro Ser Gln Leu Pro Pro Arg Ala Ala Pro Pro Pro Ala Arg  
20 25 30

Met Leu Glu Glu Ala Gly Glu Val Leu Glu Asn  
35 40

<210> 97

<211> 34

<212> PRT

<213> Homo sapiens

<400> 97

His Lys Leu Leu Thr Glu Ile Gly Lys Val Ala Gly Thr Pro Ser Phe  
1 5 10 15

Leu Leu Thr Phe Tyr Gly Ala Ser Val Gly Ile Val Gly Glu Ser Thr  
20 25 30

Tyr Asn

<210> 98

<211> 25

<212> PRT

<213> Homo sapiens

<400> 98

Gly Arg Val Glu Gly Pro Pro Ala Trp Glu Ala Ala Pro Trp Pro Ser  
1 5 10 15

Leu Pro Cys Gly Pro Cys Ile Pro Ile  
20 25

<210> 99

<211> 332

<212> PRT

<213> Homo sapiens

<400> 99

Asn Leu Trp Gly Leu Gln Pro Arg Pro Pro Ala Ser Leu Leu Gln Pro  
1 5 10 15

Thr Ala Ser Tyr Ser Arg Lys Asp Lys Asp Gln Arg Lys Gln Gln Ala  
20 25 30

Met Trp Arg Val Pro Ser Asp Leu Lys Met Leu Lys Arg Leu Lys Thr  
35 40 45

Gln Met Ala Glu Val Arg Cys Met Lys Thr Asp Val Lys Asn Thr Leu  
50 55 60

Ser Glu Ile Lys Ser Ser Ser Ala Ala Ser Gly Asp Met Gln Thr Ser  
65 70 75 80

Leu Phe Ser Ala Asp Gln Ala Ala Leu Ala Ala Cys Gly Thr Glu Asn  
85 90 95

0050282 011000



Ser Gly Arg Leu Gln Asp Leu Gly Met Glu Leu Leu Ala Lys Ser Ser  
 100 105 110  
 Val Ala Asn Cys Tyr Ile Arg Asn Ser Thr Asn Lys Lys Ser Asn Ser  
 115 120 125  
 Pro Lys Pro Ala Arg Ser Ser Val Ala Gly Ser Leu Ser Leu Arg Arg  
 130 135 140  
 Ala Val Asp Pro Gly Glu Asn Ser Arg Ser Lys Gly Asp Cys Gln Thr  
 145 150 155 160  
 Leu Ser Glu Gly Ser Pro Gly Ser Ser Gln Ser Gly Ser Arg His Ser  
 165 170 175  
 Ser Pro Arg Ala Leu Ile His Gly Ser Ile Gly Asp Ile Leu Pro Lys  
 180 185 190  
 Thr Glu Asp Arg Gln Cys Lys Ala Leu Asp Ser Asp Ala Val Val Val  
 195 200 205  
 Ala Val Phe Ser Gly Leu Pro Ala Val Glu Lys Arg Arg Lys Met Val  
 210 215 220  
 Thr Leu Gly Ala Asn Ala Lys Gly Gly His Leu Glu Gly Leu Gln Met  
 225 230 235 240  
 Thr Asp Leu Glu Asn Asn Ser Glu Thr Gly Glu Leu Gln Pro Val Leu  
 245 250 255  
 Pro Glu Gly Ala Ser Ala Ala Pro Glu Glu Gly Met Ser Ser Asp Ser  
 260 265 270  
 Asp Ile Glu Cys Asp Thr Glu Asn Glu Glu Gln Glu Glu His Thr Ser  
 275 280 285  
 Val Gly Gly Phe His Asp Ser Phe Met Val Met Thr Gln Pro Pro Asp  
 290 295 300  
 Glu Asp Thr His Ser Ser Phe Pro Asp Gly Glu Gln Ile Gly Pro Glu  
 305 310 315 320  
 Asp Leu Ser Phe Asn Thr Asp Glu Asn Ser Gly Arg  
 325 330

<210> 100  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 100  
 Asn Leu Trp Gly Leu Gln Pro Arg Pro Pro Ala Ser Leu Leu Gln Pro  
 1 5 10 15

Thr Ala Ser Tyr Ser Arg Lys Asp Lys Asp Gln Arg Lys Gln Gln Ala  
 20 25 30

Met Trp Arg Val Pro Ser Asp Leu  
 35 40

<210> 101  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

10050882-011802

&lt;400&gt; 101

Lys Met Leu Lys Arg Leu Lys Thr Gln Met Ala Glu Val Arg Cys Met  
 1 5 10 15

Lys Thr Asp Val Lys Asn Thr Leu Ser Glu Ile Lys Ser Ser Ser Ala  
 20 25 30

Ala Ser Gly Asp Met Gln Thr Ser Leu  
 35 40

&lt;210&gt; 102

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 102

Phe Ser Ala Asp Gln Ala Ala Leu Ala Ala Cys Gly Thr Glu Asn Ser  
 1 5 10 15

Gly Arg Leu Gln Asp Leu Gly Met Glu Leu Leu Ala Lys Ser Ser Val  
 20 25 30

Ala Asn Cys Tyr Ile Arg Asn Ser Thr  
 35 40

&lt;210&gt; 103

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 103

Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala Gly  
 1 5 10 15

Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg Ser  
 20 25 30

Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly  
 35 40

&lt;210&gt; 104

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 104

Ser Pro Gly Ser Ser Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala  
 1 5 10 15

Leu Ile His Gly Ser Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg  
 20 25 30

Gln Cys Lys Ala Leu Asp Ser Asp Ala Val Val Val  
 35 40

&lt;210&gt; 105

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 105

10050882.011802

Ala Val Phe Ser Gly Leu Pro Ala Val Glu Lys Arg Arg Lys Met Val  
1 5 10 15

Thr Leu Gly Ala Asn Ala Lys Gly Gly His Leu Glu Gly Leu Gln Met  
20 25 30

Thr Asp Leu Glu Asn Asn Ser Glu Thr Gly  
35 40

<210> 106

<211> 44

<212> PRT

<213> Homo sapiens

<400> 106

Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu Glu  
1 5 10 15

Gly Met Ser Ser Asp Ser Asp Ile Glu Cys Asp Thr Glu Asn Glu Glu  
20 25 30

Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp  
35 40

<210> 107

<211> 38

<212> PRT

<213> Homo sapiens

<400> 107

Ser Phe Met Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser  
1 5 10 15

Phe Pro Asp Gly Glu Gln Ile Gly Pro Glu Asp Leu Ser Phe Asn Thr  
20 25 30

Asp Glu Asn Ser Gly Arg  
35

<210> 108

<211> 33

<212> PRT

<213> Homo sapiens

<400> 108

His Ala Ser Gly Trp Ala Cys Leu Gly Arg Arg Arg Cys Arg Gly Phe  
1 5 10 15

Ser Phe Arg Pro Leu His Gly Gly Gly Cys Leu Thr Gly Ser Pro Ser  
20 25 30

Gly

<210> 109

<211> 476

<212> PRT

<213> Homo sapiens

<400> 109

His Ala Ser Gly Trp Ala Cys Leu Gly Arg Arg Arg Cys Arg Gly Phe  
1 5 10 15

10050992-011902

Ser Phe Arg Pro Leu His Gly Gly Gly Cys Leu Thr Gly Ser Pro Ser  
 20 25 30  
 Gly Met Arg Leu Thr Arg Lys Arg Leu Cys Ser Phe Leu Ile Ala Leu  
 35 40 45  
 Tyr Cys Leu Phe Ser Leu Tyr Ala Ala Tyr His Val Phe Phe Gly Arg  
 50 55 60  
 Arg Arg Gln Ala Pro Ala Gly Ser Pro Arg Gly Leu Arg Lys Gly Ala  
 65 70 75 80  
 Ala Pro Ala Arg Glu Arg Arg Gly Arg Glu Gln Ser Thr Leu Glu Ser  
 85 90 95  
 Glu Glu Trp Asn Pro Trp Glu Gly Asp Glu Lys Asn Glu Gln Gln His  
 100 105 110  
 Arg Phe Lys Thr Ser Leu Gln Ile Leu Asp Lys Ser Thr Lys Gly Lys  
 115 120 125  
 Thr Asp Leu Ser Val Gln Ile Trp Gly Lys Ala Ala Ile Gly Leu Tyr  
 130 135 140  
 Leu Trp Glu His Ile Phe Glu Gly Leu Leu Asp Pro Ser Asp Val Thr  
 145 150 155 160  
 Ala Gln Trp Arg Glu Gly Lys Ser Ile Val Gly Arg Thr Gln Tyr Ser  
 165 170 175  
 Phe Ile Thr Gly Pro Ala Val Ile Pro Gly Tyr Phe Ser Val Asp Val  
 180 185 190  
 Asn Asn Val Val Leu Ile Leu Asn Gly Arg Glu Lys Ala Lys Ile Phe  
 195 200 205  
 Tyr Ala Thr Gln Trp Leu Leu Tyr Ala Gln Asn Leu Val Gln Ile Gln  
 210 215 220  
 Lys Leu Gln His Leu Ala Val Val Leu Leu Gly Asn Glu His Cys Asp  
 225 230 235 240  
 Asn Glu Trp Ile Asn Pro Phe Leu Lys Arg Asn Gly Gly Phe Val Glu  
 245 250 255  
 Leu Leu Phe Ile Ile Tyr Asp Ser Pro Trp Ile Asn Asp Val Asp Val  
 260 265 270  
 Phe Gln Trp Pro Leu Gly Val Ala Thr Tyr Arg Asn Phe Pro Val Val  
 275 280 285  
 Glu Ala Ser Trp Ser Met Leu His Asp Glu Arg Pro Tyr Leu Cys Asn  
 290 295 300  
 Phe Leu Gly Thr Ile Tyr Glu Asn Ser Ser Arg Gln Ala Leu Met Asn  
 305 310 315 320  
 Ile Leu Lys Lys Asp Gly Asn Asp Lys Leu Cys Trp Val Ser Ala Arg  
 325 330 335  
 Glu His Trp Gln Pro Gln Glu Thr Asn Glu Ser Leu Lys Asn Tyr Gln  
 340 345 350  
 Asp Ala Leu Leu Gln Ser Asp Leu Thr Leu Cys Pro Val Gly Val Asn  
 355 360 365

10050882-011902

Thr Glu Cys Tyr Arg Ile Tyr Glu Ala Cys Ser Tyr Gly Ser Ile Pro  
 370 375 380  
 Val Val Glu Asp Val Met Thr Ala Gly Asn Cys Gly Asn Thr Ser Val  
 385 390 395 400  
 His His Gly Ala Pro Leu Gln Leu Leu Lys Ser Met Gly Ala Pro Phe  
 405 410 415  
 Ile Phe Ile Lys Asn Trp Lys Glu Leu Pro Ala Val Leu Glu Lys Glu  
 420 425 430  
 Lys Thr Ile Ile Leu Gln Glu Lys Ile Glu Arg Arg Lys Met Leu Leu  
 435 440 445  
 Gln Trp Tyr Gln His Phe Lys Thr Glu Leu Lys Met Lys Phe Thr Asn  
 450 455 460  
 Ile Leu Glu Ser Ser Phe Leu Met Asn Asn Lys Ser  
 465 470 475

<210> 110  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 110  
 Pro Gly Asn Gly Phe Val Val Trp Ser Leu Ala Gly Trp Arg Pro Ala  
 1 5 10 15  
 Arg Gly Arg Pro Leu Ala Ala Thr Leu Val Leu His Leu Ala Leu Ala  
 20 25 30  
 Asp Gly Ala Val Leu Leu Leu Thr Pro Leu Phe Val Ala Phe Leu Thr  
 35 40 45  
 Arg Gln Ala Trp Pro Leu Gly Gln Ala Gly Cys Lys Ala Val Tyr Tyr  
 50 55 60  
 Val Cys Ala Leu  
 65

<210> 111  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Phe Gly Leu Leu Trp Ala Pro Tyr His Ala Val Asn Leu Leu Gln Ala  
 1 5 10 15  
 Val Ala Ala Leu Ala Pro Pro Glu Gly Ala Leu Ala Lys Leu Gly Gly  
 20 25 30  
 Ala Gly Gln Ala Ala Arg Ala Gly Thr Thr Ala Leu Ala Phe Phe Ser  
 35 40 45  
 Ser Ser Val Asn Pro Val Leu Tyr Val Phe Thr Ala Gly Asp Leu Leu  
 50 55 60  
 Pro Arg Ala Gly Pro Arg Phe Leu Thr Arg Leu Phe Glu Gly Ser Gly  
 65 70 75 80

10050882.011000

Glu Ala Arg Gly Gly  
85

<210> 112  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 112  
Tyr Arg His Leu Trp Arg Asp Arg Val Cys Gln Leu Cys His Pro Ser  
1 5 10 15  
Pro Val His Ala Ala Ala His Leu Ser Leu Glu Thr Leu Thr Ala Phe  
20 25 30  
Val Leu Pro Phe Gly Leu Met Leu Gly Cys Tyr Ser Val Thr Leu Ala  
35 40 45  
Arg Leu Arg Gly Ala Arg Trp Gly Ser Gly Arg His Gly Ala Arg Val  
50 55 60  
Gly Arg Leu Val Ser Ala Ile Val  
65 70

<210> 113  
<211> 172  
<212> PRT  
<213> Homo sapiens

<400> 113  
Ala Pro Arg Leu Leu Leu Leu Asn Leu Ser Ala Ser Pro Gly Pro Gln  
1 5 10 15  
Ser Cys Leu His Pro Ala Trp Glu Arg Asp Thr Ala Glu Leu Glu Asp  
20 25 30  
Phe Ala Gly His Arg His Ser Leu Pro Ala Ala Gly Gly Ala Ala Gly  
35 40 45  
Ala Ala Trp Gln Arg Leu Arg Gly Val Glu Leu Gly Gly Leu Ala Ala  
50 55 60  
Cys Thr Gly Ala Thr Ala Gly Gly His Ala Cys Ala Ala Pro Gly Ala  
65 70 75 80  
Gly Arg Arg Arg Gly Ala Ala Ala His Ala Ala Leu Cys Gly Leu Pro  
85 90 95  
Asp Pro Ala Ser Leu Ala Ala Gly Pro Gly Gly Leu Gln Gly Gly Val  
100 105 110  
Leu Arg Val Arg Ala Gln His Val Arg Gln Arg Ala Ala His Arg Pro  
115 120 125  
Ala Gln Pro Ala Ala Leu Pro Arg Gly His Pro Pro Leu Pro Gly Ala  
130 135 140  
Ser Val Arg Ser Pro Ala Leu Ala Arg Arg Leu Leu Leu Ala Val Trp  
145 150 155 160  
Leu Ala Ala Leu Leu Leu Ala Val Pro Ala Ala Val  
165 170

10050882-014802

<210> 114  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 114  
 Pro Ser Ser Ala Cys Ser Gly Pro Pro Thr Thr Gln Ser Thr Phe Cys  
   1                  5                  10                  15  
 Arg Arg Ser Gln Arg Trp Leu His Arg Lys Gly Pro Trp Arg Ser Trp  
           20                  25                  30  
 Ala Glu Pro Ala Arg Arg Arg Glu Arg Glu Leu Arg Pro Trp Pro Ser  
       35                  40                  45  
 Ser Val Leu Ala Ser Thr Arg Cys Ser Thr Ser Ser Pro Leu Glu Ile  
       50                  55                  60  
 Cys Cys Pro Gly Gln Val Pro Val Ser Ser Arg Gly Ser Ser Lys Ala  
       65                  70                  75                  80  
 Leu Gly Arg Pro Glu Gly Ala Ala Ala  
                   85

<210> 115  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 115  
 Pro Gly Lys Pro Gly Arg Trp Ala Arg Arg Ala Ala Arg Arg Cys Thr  
   1                  5                  10                  15  
 Thr Cys Ala Arg Ser Ala Cys Thr Pro Ala Cys Cys Ser Pro Ala Cys  
           20                  25                  30  
 Ser Ala Cys Ser Ala Ala Ser Arg Ser Pro Ala Pro Ser Trp Arg Leu  
       35                  40                  45  
 Gly Ala Gln Pro Gly Pro Gly Pro Pro Pro Ala Ala Gly Gly Leu Ala  
       50                  55                  60  
 Gly Arg Pro Val Ala Arg Arg Pro Gly Arg Arg Leu Pro Pro Pro Val  
       65                  70                  75                  80  
 Glu Gly Pro Arg Met Pro Ala Val Pro Pro Val Ala Gly Pro Arg Arg  
           85                  90                  95  
 Arg Pro Pro Glu Pro Gly Asp Ser Asp Arg Phe Arg Ala Ser Phe Arg  
          100                 105                 110  
 Ala Asp Ala Arg Leu Leu Gln Arg Asp Ala Gly Thr Ala Ala Gly Arg  
       115                 120                 125  
 Pro Leu Gly Leu Arg Ala Ala Arg Gly Ala Gly Gly Pro Ala Gly Glu  
       130                 135                 140  
 Arg His Arg Ala Phe  
 145

<210> 116  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

10050882.01800

&lt;400&gt; 116

Met Tyr Ala Ser Val Leu Leu Thr Gly Leu Leu Ser Leu Gln Arg Cys  
1 5 10 15Leu Ala Val Thr Arg Pro Phe Leu Ala Pro Arg Cys Ala Ala Arg Pro  
20 25 30Trp Pro Ala Ala Cys Cys Trp Arg Ser Gly Trp Pro Pro Cys Cys Ser  
35 40 45Pro Ser Arg Pro Pro Ser Thr Ala Thr Cys Gly Gly Thr Ala Tyr Ala  
50 55 60Ser Cys Ala Thr Arg Arg Arg Ser Thr Pro Pro Pro Thr  
65 70 75

&lt;210&gt; 117

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 117

Val Ser Pro Gln Lys Ala Ala Ser Leu Val Arg Ile Arg Trp Arg His  
1 5 10 15Val Arg Pro Ser Pro Pro Ser Ala Ser Arg Leu Arg Arg Leu Pro Pro  
20 25 30Arg His Leu Thr Val Ala Xaa Arg Pro Arg Arg Glu Gly Val Gly Thr  
35 40 45Gly Ser Arg Ala Val Leu Cys Ile Leu Ala Thr Cys Gly Ser Lys Met  
50 55 60Ser Asp Ile Gly Asp Trp Phe Arg Ser Ile Pro Ala Ile Thr Arg Tyr  
65 70 75 80Trp Phe Ala Ala Thr Val Ala Val Pro Leu Val Gly Lys Leu Gly Leu  
85 90 95Ile Ser Pro Ala Tyr Leu Phe Leu Trp Pro Glu Ala Phe Leu Tyr Arg  
100 105 110Phe Gln Ile Trp Arg Pro Ile Thr Ala Thr Phe Tyr Phe Pro Val Gly  
115 120 125Pro Gly Thr Gly Phe Leu Tyr Leu Val Asn Leu Tyr Phe Leu Tyr Gln  
130 135 140Tyr Ser Thr Arg Leu Glu Thr Gly Ala Phe Asp Gly Arg Pro Ala Asp  
145 150 155 160

Tyr Leu Phe

&lt;210&gt; 118

&lt;211&gt; 43

&lt;212&gt; PRT

10050882-011802



<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 118

Val Ser Pro Gln Lys Ala Ala Ser Leu Val Arg Ile Arg Trp Arg His  
1 5 10 15

Val Arg Pro Ser Pro Pro Ser Ala Ser Arg Leu Arg Arg Leu Pro Pro  
20 25 30

Arg His Leu Thr Val Ala Xaa Arg Pro Arg Arg  
35 40

<210> 119

<211> 44

<212> PRT

<213> Homo sapiens

<400> 119

Glu Gly Val Gly Thr Gly Ser Arg Ala Val Leu Cys Ile Leu Ala Thr  
1 5 10 15

Cys Gly Ser Lys Met Ser Asp Ile Gly Asp Trp Phe Arg Ser Ile Pro  
20 25 30

Ala Ile Thr Arg Tyr Trp Phe Ala Ala Thr Val Ala  
35 40

<210> 120

<211> 45

<212> PRT

<213> Homo sapiens

<400> 120

Val Pro Leu Val Gly Lys Leu Gly Leu Ile Ser Pro Ala Tyr Leu Phe  
1 5 10 15

Leu Trp Pro Glu Ala Phe Leu Tyr Arg Phe Gln Ile Trp Arg Pro Ile  
20 25 30

Thr Ala Thr Phe Tyr Phe Pro Val Gly Pro Gly Thr Gly  
35 40 45

<210> 121

<211> 31

<212> PRT

<213> Homo sapiens

<400> 121

Phe Leu Tyr Leu Val Asn Leu Tyr Phe Leu Tyr Gln Tyr Ser Thr Arg  
1 5 10 15

Leu Glu Thr Gly Ala Phe Asp Gly Arg Pro Ala Asp Tyr Leu Phe  
20 25 30

<210> 122

<211> 314

<212> PRT

2007-09-01 10:50:00

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (300)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 122

Val	Ser	Pro	Gln	Lys	Ala	Ala	Ser	Leu	Val	Arg	Ile	Arg	Trp	Arg	His
1				5					10					15	
Val	Arg	Pro	Ser	Pro	Pro	Ser	Ala	Ser	Arg	Leu	Arg	Arg	Leu	Pro	Pro
			20					25					30		
Arg	His	Leu	Thr	Val	Ala	Xaa	Arg	Pro	Arg	Arg	Glu	Gly	Val	Gly	Thr
		35					40					45			
Gly	Ser	Arg	Ala	Val	Leu	Cys	Ile	Leu	Ala	Thr	Cys	Gly	Ser	Lys	Met
	50					55					60				
Ser	Asp	Ile	Gly	Asp	Trp	Phe	Arg	Ser	Ile	Pro	Ala	Ile	Thr	Arg	Tyr
	65				70					75					80
Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly	Leu
				85					90					95	
Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr	Arg
			100					105					110		
Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val	Gly
		115					120					125			
Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr	Gln
	130					135					140				
Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala	Asp
145				150						155					160
Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr	Gly
			165					170						175	
Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser	Val
			180					185					190		
Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe	Trp
	195						200					205			
Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu	Gly
	210					215					220				
Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly	Asn
225					230					235					240
Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met	Asp
			245					250						255	
Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg	Trp
			260					265					270		
Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro	Ala
	275						280					285			

10050692-011802

Ser Met Arg Arg Ala Ala Asp Gln Asn Gly Gly Xaa Gly Arg His Asn  
290 295 300

Trp Gly Gln Gly Phe Arg Leu Gly Asp Gln  
305 310

<210> 123  
<211> 172  
<212> PRT  
<213> Homo sapiens

<400> 123  
Ala Ala Arg Gly Leu Tyr Asp Tyr Gly Ser Gly Leu Cys Trp Ala Trp  
1 5 10 15

Ala Ala Arg Pro Ser Ser Phe Val Ser Gly Ser Ser Arg Glu Ala Pro  
20 25 30

Ser Ala Thr Ala Ala Pro Ser Trp Thr Arg Ser Val Thr Ala Ala Ser  
35 40 45

Ala Ala Ala Ala Ser Arg Met Ala Met Cys Ser Ser Thr Arg Pro Ala  
50 55 60

Arg Leu Leu Leu Pro Pro Pro Thr Thr Pro Ser Pro Arg Pro Arg Thr  
65 70 75 80

Leu Thr Pro Val Asp Pro Cys Ser Gly Gly Cys Arg Leu Thr Ser Lys  
85 90 95

Asp His Thr Pro Arg Val Gly Thr Gly Gln Gly Arg Gly Gln Gly Thr  
100 105 110

Phe Trp Leu Ser Arg Asp Glu Gly Tyr Phe Ala Glu Asp Thr Arg Ile  
115 120 125

Gly His Phe Gln Asp Ser Leu Pro Ala Pro Leu Pro Leu Pro Ser Phe  
130 135 140

Glu Ala Leu Ile Lys His Lys Ser Gly Ser Pro Gly Ala Val Cys Gln  
145 150 155 160

Arg Trp Ala Gly Gly Glu Thr Asp Arg Gly Cys Gly  
165 170

<210> 124  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 124  
Ala Ala Arg Gly Leu Tyr Asp Tyr Gly Ser Gly Leu Cys Trp Ala Trp  
1 5 10 15

Ala Ala Arg Pro Ser Ser Phe Val Ser Gly Ser Ser Arg Glu Ala Pro  
20 25 30

Ser Ala Thr Ala Ala Pro Ser  
35

<210> 125  
<211> 39

10050882-011802

<212> PRT  
 <213> Homo sapiens

<400> 125  
 Trp Thr Arg Ser Val Thr Ala Ala Ser Ala Ala Ala Ala Ser Arg Met  
   1                  5                  10                  15  
 Ala Met Cys Ser Ser Thr Arg Pro Ala Arg Leu Leu Leu Pro Pro Pro  
                   20                  25                  30  
 Thr Thr Pro Ser Pro Arg Pro  
                   35

<210> 126  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 126  
 Arg Thr Leu Thr Pro Val Asp Pro Cys Ser Gly Gly Cys Arg Leu Thr  
   1                  5                  10                  15  
 Ser Lys Asp His Thr Pro Arg Val Gly Thr Gly Gln Gly Arg Gly Gln  
                   20                  25                  30  
 Gly Thr Phe Trp Leu Ser Arg Asp Glu  
                   35                  40

<210> 127  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<400> 127  
 Gly Tyr Phe Ala Glu Asp Thr Arg Ile Gly His Phe Gln Asp Ser Leu  
   1                  5                  10                  15  
 Pro Ala Pro Leu Pro Leu Pro Ser Phe Glu Ala Leu Ile Lys His Lys  
                   20                  25                  30  
 Ser Gly Ser Pro Gly Ala Val Cys Gln Arg  
                   35                  40

<210> 128  
 <211> 11  
 <212> PRT  
 <213> Homo sapiens

<400> 128  
 Trp Ala Gly Gly Glu Thr Asp Arg Gly Cys Gly  
   1                  5                  10

<210> 129  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 129  
 Ala Pro Val Ser Ile Ile Pro Phe Cys Val Cys Pro Cys Val Gln Asn  
   1                  5                  10                  15  
 Val Leu Leu Pro Leu

10050332-011303

20

<210> 130  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 130  
 Met Phe Leu Leu Asp Gly Ser Asn Trp Ile Leu His Cys Pro Ile Thr  
 1 5 10 15  
 Leu Arg Thr Tyr Thr Thr Asn Leu Ser Ile Lys Phe Ser Lys Cys Ser  
 20 25 30  
 Val Asn Ile Tyr Ser Leu Glu Asn Lys Xaa Phe Phe Ser Lys Lys Lys  
 35 40 45  
 Lys Lys Lys Arg Lys Glu Asn Asn Pro Gly Asn Lys Ile Ser Asn Gly  
 50 55 60  
 Glu Ile Ser Val Thr Leu Thr Gly Ile Cys Lys Ile Phe Trp Lys Arg  
 65 70 75 80  
 Ala Pro Phe Phe Phe His Phe Gln Ser Tyr Leu Trp Cys Ser Tyr Arg  
 85 90 95  
 Val Gln Thr Ser Arg Ser Phe  
 100

<210> 131  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens

<400> 131  
 Gly Arg Gly Pro Thr Ala Pro Ala Val Arg Asp Pro Asn Ala Ile Pro  
 1 5 10 15  
 Ala Gln Arg Ser Met Ala Ala Thr Asp Ser Met Arg Gly Glu Ala Pro  
 20 25 30  
 Gly Ala Glu Thr Pro Ser Leu Arg His Arg Gly Gln Ala Ala Gln Pro  
 35 40 45  
 Glu Pro Ser Thr Gly Phe Thr Ala Thr Pro Pro Ala Pro Asp Ser Pro  
 50 55 60  
 Gln Glu Pro Leu Val Leu Arg Leu Lys Phe Leu Asn Asp Ser Glu Gln  
 65 70 75 80  
 Val Ala Arg Ala Trp Pro His Asp Thr Ile Gly Ser Leu Lys Arg Thr  
 85 90 95  
 Gln Phe Pro Gly Arg Glu Gln Gln Val Arg Leu Ile Tyr Gln Gly Gln  
 100 105 110  
 Leu Leu Gly Asp Asp Thr Gln Thr Leu Gly Ser Leu His Leu Pro Pro  
 115 120 125

100503022-011802

Asn Cys Val Leu His Cys His Val Ser Thr Arg Val Gly Pro Pro Asn  
130 135 140

Pro Pro Cys Pro Pro Gly Ser Glu Pro Gly Pro Ser Gly Leu Glu Ile  
145 150 155 160

Gly Ser Leu Leu Leu Pro Leu Leu Leu Leu Leu Leu Leu Leu Trp  
165 170 175

Tyr Cys Gln Ile Gln Tyr Arg Pro Phe Phe Pro Leu Thr Ala Thr Leu  
180 185 190

Gly Leu Ala Gly Phe Thr Leu Leu Leu Ser Leu Leu Ala Phe Ala Met  
195 200 205

Tyr Arg Pro  
210

<210> 132

<211> 42

<212> PRT

<213> Homo sapiens

<400> 132

Gly Arg Gly Pro Thr Ala Pro Ala Val Arg Asp Pro Asn Ala Ile Pro  
1 5 10 15

Ala Gln Arg Ser Met Ala Ala Thr Asp Ser Met Arg Gly Glu Ala Pro  
20 25 30

Gly Ala Glu Thr Pro Ser Leu Arg His Arg  
35 40

<210> 133

<211> 43

<212> PRT

<213> Homo sapiens

<400> 133

Gly Gln Ala Ala Gln Pro Glu Pro Ser Thr Gly Phe Thr Ala Thr Pro  
1 5 10 15

Pro Ala Pro Asp Ser Pro Gln Glu Pro Leu Val Leu Arg Leu Lys Phe  
20 25 30

Leu Asn Asp Ser Glu Gln Val Ala Arg Ala Trp  
35 40

<210> 134

<211> 46

<212> PRT

<213> Homo sapiens

<400> 134

Pro His Asp Thr Ile Gly Ser Leu Lys Arg Thr Gln Phe Pro Gly Arg  
1 5 10 15

Glu Gln Gln Val Arg Leu Ile Tyr Gln Gly Gln Leu Leu Gly Asp Asp  
20 25 30

Thr Gln Thr Leu Gly Ser Leu His Leu Pro Pro Asn Cys Val  
35 40 45

200510-28805007

<210> 135  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Leu His Cys His Val Ser Thr Arg Val Gly Pro Pro Asn Pro Pro Cys  
   1                  5                  10                  15  
 Pro Pro Gly Ser Glu Pro Gly Pro Ser Gly Leu Glu Ile Gly Ser Leu  
                   20                  25                  30  
 Leu Leu Pro Leu Leu Leu Leu Leu Leu Leu Leu Trp Tyr  
           35                  40                  45

<210> 136  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 136  
 Cys Gln Ile Gln Tyr Arg Pro Phe Phe Pro Leu Thr Ala Thr Leu Gly  
   1                  5                  10                  15  
 Leu Ala Gly Phe Thr Leu Leu Leu Ser Leu Leu Ala Phe Ala Met Tyr  
                   20                  25                  30  
 Arg Pro

<210> 137  
 <211> 394  
 <212> PRT  
 <213> Homo sapiens

<400> 137  
 Thr Arg Pro Gly Ile Trp Gly Gln Ala Ala Arg Gly Ala Trp Arg Asp  
   1                  5                  10                  15  
 Phe Gln Arg Arg Arg Gly Leu Gly Ser Ala Ala Gly Lys Ala Gly Ala  
                   20                  25                  30  
 Met Thr Leu Ile Glu Gly Val Gly Asp Glu Val Thr Val Leu Phe Ser  
           35                  40                  45  
 Val Leu Ala Cys Leu Leu Val Leu Ala Leu Ala Trp Val Ser Thr His  
   50                  55                  60  
 Thr Ala Glu Gly Gly Asp Pro Leu Pro Gln Pro Ser Gly Thr Pro Thr  
   65                  70                  75                  80  
 Pro Ser Gln Pro Ser Ala Ala Met Ala Ala Thr Asp Ser Met Arg Gly  
                   85                  90                  95  
 Glu Ala Pro Gly Ala Glu Thr Pro Ser Leu Arg His Arg Gly Gln Ala  
           100                  105                  110  
 Ala Gln Pro Glu Pro Ser Thr Gly Phe Thr Ala Thr Pro Pro Ala Pro  
   115                  120                  125  
 Asp Ser Pro Gln Glu Pro Leu Val Leu Arg Leu Lys Phe Leu Asn Asp  
   130                  135                  140

100509882-011802

Ser Glu Gln Val Ala Arg Ala Trp Pro His Asp Thr Ile Gly Ser Leu  
 145 150 155 160  
 Lys Arg Thr Gln Phe Pro Gly Arg Glu Gln Gln Val Arg Leu Ile Tyr  
 165 170 175  
 Gln Gly Gln Leu Leu Gly Asp Asp Thr Gln Thr Leu Gly Ser Leu His  
 180 185 190  
 Leu Pro Pro Asn Cys Val Leu His Cys His Val Ser Thr Arg Val Gly  
 195 200 205  
 Pro Pro Asn Pro Pro Cys Pro Pro Gly Ser Glu Pro Arg Pro Leu Arg  
 210 215 220  
 Ala Gly Asn Arg Gln Pro Ala Ala Ala Pro Ala Ala Pro Ala Val Ala  
 225 230 235 240  
 Ala Ala Leu Val Leu Pro Asp Pro Val Pro Ala Leu Leu Ser Pro Asp  
 245 250 255  
 Arg His Ser Gly Pro Gly Arg Leu His Pro Ala Pro Gln Ser Pro Gly  
 260 265 270  
 Leu Cys His Val Pro Pro Val Val Pro Pro Arg Ala Leu Gly Ser Val  
 275 280 285  
 Ala Gly Pro Ser Gly Pro Cys Ser Pro Arg Arg Gly Gly Ser Cys Cys  
 290 295 300  
 Leu Pro Arg Pro Ala Ser Pro Ala Cys Leu Phe Pro Leu Pro Trp Ser  
 305 310 315 320  
 Pro Ala Leu Arg Arg Arg Gly Leu Pro Gly Leu Ala Glu Ala Pro Pro  
 325 330 335  
 Cys Asp Arg Arg Gly Ser Gly Pro Pro Pro Gly Ala Ala Asp Pro Gln  
 340 345 350  
 Pro Ala Leu Gly Val Gly Ser Ser Gly Ser Gly Ile Cys Cys Arg Cys  
 355 360 365  
 Leu Gly Pro Gly Gln Ser Arg Ala Ala Pro Gly Ala Arg Leu Ser Val  
 370 375 380  
 Leu Pro Glu Asp Pro Ala Ala Ser Asn Pro  
 385 390

<210> 138  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 138  
 Met Asp Arg Arg Phe Lys Leu Trp Glu Val Phe Gly Glu Lys Cys Glu  
 1 5 10 15  
 Phe Lys Gly Ser Leu Ser Gly Ser Asn Ala Gly Ile Thr Ser Ile Glu  
 20 25 30  
 Phe Asp Ser Ala Gly Ser Tyr Leu Leu Ala Ala Ser Asn Asp Phe Ala  
 35 40 45  
 Ser Arg Ile Trp Thr Val Asp Asp Tyr Arg Leu Arg His Thr Leu Thr  
 50 55 60

10050382-011802



Gly His Ser Gly Lys Val Leu Ser Ala Lys Phe Leu Leu Asp Asn Ala  
 65 70 75 80  
 Arg Ile Val Ser Gly Ser His Asp Arg Thr Leu Lys Leu Trp Asp Leu  
 85 90 95  
 Arg Ser Lys Val Cys Ile Lys Thr Val Phe Ala Gly Ser Ser Cys Asn  
 100 105 110  
 Asp Ile Val Cys Thr Glu Gln Cys Val Met Ser Gly His Phe Asp Lys  
 115 120 125  
 Lys Ile Arg Phe Trp Asp Ile Arg Ser Glu Ser Ile Val Arg Glu Met  
 130 135 140  
 Glu Leu Leu Gly Lys Ile Thr Ala Leu Asp Leu Asn Pro Glu Arg Thr  
 145 150 155 160  
 Glu Leu Leu Ser Cys Ser Arg Asp Asp Leu Leu Lys Val Ile Asp Leu  
 165 170 175  
 Arg Thr Asn Ala Ile Lys Gln Thr Phe Ser Ala Pro Gly Phe Lys Cys  
 180 185 190  
 Gly Ser Asp Trp Thr Arg Val Val Phe Ser Pro Asp Gly Ser Tyr Val  
 195 200 205  
 Ala Ala Gly Ser Ala Glu Gly Ser Leu Tyr Ile Trp Ser Val Leu Thr  
 210 215 220  
 Gly Lys Val Glu Lys Val Leu Ser Lys Gln His Ser Ser Ser Ile Asn  
 225 230 235 240  
 Ala Val Ala Trp Ser Pro Ser Gly Ser His Val Val Ser Val Asp Lys  
 245 250 255  
 Gly Cys Lys Ala Val Leu Trp Ala Gln Tyr  
 260 265

<210> 139  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 139  
 Met Asp Arg Arg Phe Lys Leu Trp Glu Val Phe Gly Glu Lys Cys Glu  
 1 5 10 15  
 Phe Lys Gly Ser Leu Ser Gly Ser Asn Ala Gly Ile Thr Ser Ile Glu  
 20 25 30  
 Phe Asp Ser Ala Gly Ser Tyr Leu Leu Ala Ala Ser Asn Asp Phe Ala  
 35 40 45  
 Ser Arg Ile Trp Thr  
 50

<210> 140  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 140

20050802-015001

Val Asp Asp Tyr Arg Leu Arg His Thr Leu Thr Gly His Ser Gly Lys  
1 5 10 15

Val Leu Ser Ala Lys Phe Leu Leu Asp Asn Ala Arg Ile Val Ser Gly  
20 25 30

Ser His Asp Arg Thr Leu Lys Leu Trp Asp Leu Arg Ser Lys Val Cys  
35 40 45

Ile Lys Thr Val Phe  
50

<210> 141  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 141  
Ala Gly Ser Ser Cys Asn Asp Ile Val Cys Thr Glu Gln Cys Val Met  
1 5 10 15

Ser Gly His Phe Asp Lys Lys Ile Arg Phe Trp Asp Ile Arg Ser Glu  
20 25 30

Ser Ile Val Arg Glu Met Glu Leu Leu Gly Lys Ile Thr Ala Leu Asp  
35 40 45

Leu Asn Pro Glu Arg  
50

<210> 142  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 142  
Thr Glu Leu Leu Ser Cys Ser Arg Asp Asp Leu Leu Lys Val Ile Asp  
1 5 10 15

Leu Arg Thr Asn Ala Ile Lys Gln Thr Phe Ser Ala Pro Gly Phe Lys  
20 25 30

Cys Gly Ser Asp Trp Thr Arg Val Val Phe Ser Pro Asp Gly Ser Tyr  
35 40 45

Val Ala Ala Gly Ser  
50

<210> 143  
<211> 54  
<212> PRT  
<213> Homo sapiens

<400> 143  
Ala Glu Gly Ser Leu Tyr Ile Trp Ser Val Leu Thr Gly Lys Val Glu  
1 5 10 15

Lys Val Leu Ser Lys Gln His Ser Ser Ser Ile Asn Ala Val Ala Trp  
20 25 30

Ser Pro Ser Gly Ser His Val Val Ser Val Asp Lys Gly Cys Lys Ala  
35 40 45

20810-28805001

Val Leu Trp Ala Gln Tyr  
50

<210> 144  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 144  
Ser Gln Leu Ala Ser Gly Lys Leu Ser Lys Tyr Trp Ala Ile  
1 5 10

<210> 145  
<211> 52  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (11)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 145  
Pro Gly Gly Gly Pro Cys Gly Asn Xaa Trp Xaa Pro Arg Gly Xaa Arg  
1 5 10 15

Glu Lys Lys Phe Val Tyr Ser Pro Asn Leu Arg Leu Ser His Gln Ser  
20 25 30

Leu Lys Val Leu Ala Leu Ala Thr Ala Ala Ala Ser Val Thr Leu Leu  
35 40 45

Thr Trp Ile Leu  
50

<210> 146  
<211> 124  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (67)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 146  
Lys Glu Glu Gln Arg Arg Gln Ala Pro Gly Gly Gln Asn Gly Ser Trp  
1 5 10 15

Ile Val Lys Lys Val Trp Phe Ala Cys Leu Ala Val Met Ser Phe Leu  
20 25 30

Gly Phe Ile Leu Asn Leu Gly Ala Arg Leu Ile Val Gln Pro Gln Ala

1050887 041800

35 40 45  
 Ala Leu Ala Ser Arg Gly Leu Arg Gly Gln Gly Leu Pro Cys Glu Thr  
     50                      55                      60  
 Gln Val Xaa Lys Arg Thr Leu Arg Pro Gly Ala Val Gly Trp Leu Val  
     65                      70                      75                      80  
 His Lys Gly Arg Arg Ala Leu Ser Ile Ser Arg Lys Ser Ala Leu Val  
                                  85                      90                      95  
 Ser Leu Gly Val Met Tyr Val Gly Pro Gly Lys Arg Pro Gly Val Val  
                                  100                      105                      110  
 Arg Lys His Ser Leu Leu Val Lys Met Gln Ala Arg  
                                  115                      120

<210> 147  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 147  
 Lys Glu Glu Gln Arg Arg Gln Ala Pro Gly Gly Gln Asn Gly Ser Trp  
     1                      5                      10                      15  
 Ile Val Lys Lys Val Trp Phe Ala Cys Leu Ala Val Met Ser Phe Leu  
                                  20                      25                      30  
 Gly Phe Ile Leu Asn Leu Gly Ala  
                                  35                      40

<210> 148  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 148  
 Arg Leu Ile Val Gln Pro Gln Ala Ala Leu Ala Ser Arg Gly Leu Arg  
     1                      5                      10                      15  
 Gly Gln Gly Leu Pro Cys Glu Thr Gln Val Xaa Lys Arg Thr Leu Arg  
                                  20                      25                      30  
 Pro Gly Ala Val Gly Trp Leu Val  
                                  35                      40

<210> 149  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 149  
 His Lys Gly Arg Arg Ala Leu Ser Ile Ser Arg Lys Ser Ala Leu Val  
     1                      5                      10                      15  
 Ser Leu Gly Val Met Tyr Val Gly Pro Gly Lys Arg Pro Gly Val Val  
                                  20                      25                      30

10050863-011802

Arg Lys His Ser Leu Leu Val Lys Met Gln Ala Arg  
           35                          40

<210> 150  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 150  
 His Ile Ile Phe Phe Arg Lys Trp Ser Thr Leu Ala Phe Ile Ile Pro  
   1                  5                  10                  15  
 Tyr Ser Ser Val Ser Gly Ile Ile Ser Ile Ala Ser Phe Met Ser Val  
           20                  25                  30  
 Ala Ser Glu Ile Ala Ser Leu Val Phe Leu Arg Lys Asn Thr Thr Phe  
           35                  40                  45  
 Trp Ser Arg Asn Ser Ser Gly Arg Gly Val Gln Ser  
   50                  55                  60

<210> 151  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (73)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 151  
 Val Leu Cys Gly Pro Gly Ala Ala Thr Arg Lys Gly Ser Gln Leu Asn  
   1                  5                  10                  15  
 Pro Ala Val Ala Ser Pro Ala Phe Pro His Pro Gly Phe Phe Ser Leu  
           20                  25                  30  
 Ser Asn Leu Gly Ser Ser Tyr Ser Ser Ser Asn Thr Met Tyr Ser Cys  
           35                  40                  45  
 Pro Ser Glu Pro Leu His Arg Leu Ser Pro Leu Pro Lys Glu Thr Pro  
   50                  55                  60  
 Leu Leu Ser Ser Pro Ser Pro Thr Xaa Pro Ser Gln Pro Ala Glu Leu  
   65                  70                  75                  80  
 Trp Phe Ile Phe Cys Ile Arg Val Lys Gly His Leu Pro Cys Gln Ser  
           85                  90                  95  
 Thr Pro Thr Leu Pro Leu Gln Ser Ser Glu Met Ser Ser Leu  
           100                  105                  110

<210> 152  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 152  
 Val Leu Cys Gly Pro Gly Ala Ala Thr Arg Lys Gly Ser Gln Leu Asn  
   1                  5                  10                  15

10050881.011800

Ser Asn Leu Gly Ser Ser Tyr  
35

```
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
```

Leu Ser Pro Leu Pro Lys Glu Thr Pro Leu Leu Ser Ser Pro Ser Pro  
20 25 30

```
<210> 154
<211> 31
<212> PRT
<213> Homo sapiens
```

Ser Thr Pro Thr Leu Pro Leu Gln Ser Ser Glu Met Ser Ser Leu  
20 25 30

```
<210> 155
<211> 47
<212> PRT
<213> Homo sapiens
```

Val Glu Pro Pro Ala Glu Pro Pro Ala Glu Val Pro Pro Ser Gly Thr  
20 25 30

Pro Pro Pro Pro Ser Thr Ser Glu Pro Leu Ser Arg Arg Arg Pro  
35 40 45

```
<210> 156
<211> 432
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (206)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (316)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (395)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 156  
 Thr Ser Ser Pro Gln Arg Arg Leu Pro Ala Gly Pro Arg Pro Pro Thr  
 1 5 10 15  
 Val Glu Pro Pro Ala Glu Pro Pro Ala Glu Val Pro Pro Ser Gly Thr  
 20 25 30  
 Pro Pro Pro Pro Ser Thr Ser Glu Pro Leu Ser Arg Arg Arg Pro Met  
 35 40 45  
 Trp Gly Phe Arg Leu Leu Arg Ser Pro Pro Leu Leu Leu Leu Pro  
 50 55 60  
 Gln Leu Gly Ile Gly Asn Ala Ser Ser Cys Ser Gln Ala Arg Thr Met  
 65 70 75 80  
 Asn Pro Gly Gly Ser Gly Gly Ala Arg Cys Ser Leu Ser Ala Glu Val  
 85 90 95  
 Arg Arg Arg Gln Cys Leu Gln Leu Ser Thr Val Pro Gly Ala Xaa Pro  
 100 105 110  
 Gln Arg Xaa Asn Glu Leu Leu Leu Leu Ala Ala Ala Gly Glu Gly Leu  
 115 120 125  
 Glu Arg Gln Asp Leu Pro Gly Asp Pro Ala Lys Glu Glu Pro Gln Pro  
 130 135 140  
 Pro Pro Gln His His Val Leu Tyr Phe Pro Gly Asp Val Gln Asn Tyr  
 145 150 155 160  
 His Glu Ile Met Thr Arg His Pro Glu Asn Tyr Gln Trp Glu Asn Trp  
 165 170 175  
 Ser Leu Glu Asn Val Ala Thr Ile Leu Ala His Arg Phe Pro Asn Ser  
 180 185 190  
 Tyr Ile Trp Val Ile Lys Cys Ser Arg Met His Leu His Xaa Phe Ser  
 195 200 205  
 Cys Tyr Asp Asn Phe Val Lys Ser Asn Met Phe Gly Ala Pro Glu His  
 210 215 220  
 Asn Thr Asp Phe Gly Ala Phe Lys His Leu Tyr Met Leu Leu Val Asn  
 225 230 235 240

20050832-014802

Ala Phe Asn Leu Ser Gln Asn Ser Leu Ser Lys Lys Ser Leu Asn Val  
245 250 255

Trp Asn Lys Asp Ser Ile Ala Ser Asn Cys Arg Ser Ser Pro Ser His  
260 265 270

Thr Thr Asn Gly Cys Gln Gly Glu Lys Val Arg Thr Cys Glu Lys Ser  
275 280 285

Asp Glu Ser Ala Met Ser Phe Tyr Pro Pro Ser Leu Asn Asp Ala Ser  
290 295 300

Phe Thr Leu Ile Gly Phe Ser Lys Gly Cys Val Xaa Leu Asn Gln Leu  
305 310 315 320

Leu Phe Glu Leu Lys Glu Ala Lys Lys Asp Lys Asn Ile Asp Ala Phe  
325 330 335

Ile Lys Ser Ile Arg Thr Met Tyr Trp Leu Asp Gly Gly His Ser Gly  
340 345 350

Gly Ser Asn Thr Trp Val Thr Tyr Pro Glu Val Leu Lys Glu Phe Ala  
355 360 365

Gln Thr Gly Ile Ile Val His Thr His Val Thr Pro Tyr Gln Val Arg  
370 375 380

Asp Pro Met Arg Ser Trp Ile Gly Lys Glu Xaa Lys Lys Phe Val Gln  
385 390 395 400

Ile Leu Gly Asp Leu Gly Met Gln Val Thr Ser Gln Ile His Phe Thr  
405 410 415

Lys Glu Ala Pro Ser Ile Glu Asn His Phe Arg Val His Glu Val Phe  
420 425 430

10050882-011802